

OVERSEAS NEWS

Major EEC energy user pessimistic on savings

By Kevin Done

MRS. INDIRA GANDHI considered a spent force in Indian politics until three weeks ago, but at her mercy the fate of Prime Minister Charan Singh's shaky 22-day-old Government.

In the vote of confidence debate which is due to open today in the Lok Sabha (Lower House of Parliament), the way in which Mrs. Gandhi directs the 73 members of her Congress (Indira) faction will be crucial. If she orders them to vote against Mr. Charan Singh's Janata (Secular) Congress coalition, it is almost certain to fall.

Aware of the importance that she has suddenly acquired, Mrs. Gandhi is holding her cards close to her chest. It is unlikely that her decision will be known until the vote takes place.

While the vote of confidence debate begins today, the vote itself may not be held until Wednesday, since discussion on the Prime Minister's motion is expected to last 15 hours.

Without support from Mrs. Gandhi's Congress faction, Mr. Singh cannot hope for more than 238 votes, which is 30 votes short of the 268 votes needed to survive.

Mr. Jagjivan Ram, the Harijan (Untouchable) leader of the Janata opposition party, faces a similar predicament. He is staking a claim for Premiership on the grounds that he leads the largest single



BY K. K. SHARMA IN NEW DELHI

party in the Lok Sabha, with 204 members. Success for Mr. Ram would also be conditional upon support from Mrs. Gandhi.

Both Mrs. Gandhi and Mr.

Singh have bitterly attacked Mr.

Ram's Janata Party as sectarian and opposed to the interests of

the country's minorities and

poor—which each party claims to represent.

Mrs. Gandhi is violently opposed to Mr. Ram, who was once in her Cabinet but deserted her just before the 1977 General Election, thus contributing to her defeat.

Mr. Charan Singh has gone out of his way to find places in his Cabinet for Muslims, Christians, and Harijans during the trading for support in this week's vote.

He hastily drew up a 27-point programme which was unveiled on Saturday and reads more like an election manifesto than a programme of action.

The seven-page statement has fuelled speculation that a mid-term election is close. Many believe that Mrs. Gandhi wants an early election. She is probably the only Indian politician who stands to gain by dis-solution of the 23-month-old Lok Sabha.

A recent poll shows that 64 per cent of the Indian people feel the country was better off during Mrs. Gandhi's emergency rule, and 75 per cent want a mid-term election. As many as 48 per cent of those who voted for Mrs. Gandhi back in 1977 now want her back as Prime Minister, since many feel that India's patchwork coalition is more concerned with hanging on to power than governing. Mrs. Gandhi will undoubtedly try to cash in on the popular disgust at the current political horse-trading.

Ironically, the U.S. pressure on its three largest developing country suppliers of textiles and garments comes at a time when European countries are up in arms against an alleged U.S. invasion of their synthetic fibre and fabric markets.

The U.S. pressure on Asian suppliers is the direct outcome of a paper published by the U.S. Administration in February on "assistance for what is termed the ' beleaguered ' U.S. textile industry."

The textile programme outlined in the paper was described as "an integral part of the recent Tokyo Round trade talks of the General Agreement on Tariffs and Trade, concluded in Geneva and which has received Congressional approval from the U.S. and other key industrialised countries."

This is seen as meaning that the programme is a quid pro quo for getting U.S. industry and Congressional support for the tariff cuts and other aspects of the Tokyo Round talks.

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However they are well aware that pressure is intensifying.

President Carter, faced with the combination of an election year and rising unemployment,

looks likely to try to deliver a domestic sectional promise at the expense of U.S. international obligations.

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ers, the market is already weakening. Hong Kong's textile exports to the U.S. so far this year are down 16 per cent in volume terms. And Taiwan recently announced a marked reduction in quota utilisation rates for the first half. The second half is expected to be worse as U.S. recessionary trends take a grip.

As U.S. pressure for renegotiation increases, major supplying nations will argue that Washington is in no position to ask for further restrictions on the basis of market disruption when their own industry's sales are already on a sharp decline.

However, the weaker the market for exporters, the weaker it is likely to be for domestic producers, and thus the stronger the pressure for additional protection.

A key factor in the U.S. equation could be exports. Though a big net importer of textiles, U.S. exports were a significant \$2.6bn (£1.2bn) last year, compared with imports of \$7.6bn. Imports this year are expected to fall 10 per cent in volume while exports should rise significantly, helped by the cheaper dollar, lower U.S. domestic oil prices which gives advantage to U.S. synthetic fibre and fabric makers, and the heavy investment in the most modern machinery seen in some sections of the U.S. industry.

Apart from battling the U.S. on the basis of the need to honour agreements, the Big Three Asian exporters will argue that the U.S. industry is not quite as " beleaguered " as is being made out.

Lloyds angers Gulf insurers

BY OUR FOREIGN STAFF

GULF INSURANCE agents met in Bagdad over the weekend to discuss how they might retaliate against the Lloyds Insurance underwriters' decision to apply "war risk" premiums to shipping in the Gulf area.

In Bahrain, Mr. Emro Al-Kais, an executive of Al-Abia Insurance Company, said Gulf interests could retaliate by boycotting the London market and setting up a re-insurance

underwriters' market to handle shipping insurance. A local newspaper called the war risk premiums "blackmail."

Mr. Abdel-Aziz Al-Saqr, chairman of Kuwait's Chamber of Commerce and Industry, said in an interview with the Kuwaiti News Agency that Gulf States should impose a premium on crude oil exports. The premium would be to cover "risks of threats, rumours and rumour-mongers." He did not specify

the size of the premium he had in mind.

It is likely that Gulf insurers will send a delegation to London with the aim of persuading Lloyds to revoke its ruling.

Lloyd's decision to raise insurance on the bulk of vessels operating in the Gulf took effect on Tuesday last week. Lloyds justified its action on the grounds of prolonged and apparently continuing hostilities in the area.

Slower Irish growth forecast

BY ROBERT MAUTHNER IN PARIS

IRELAND'S GROWTH will be substantially slower in 1979 than last year, US inflation much higher, and its current account deficit likely to triple, according to the annual review of the Irish economy published by the Organisation for Economic Co-operation and Development (OECD) today.

Ireland's ambitious development programme, adopted in mid-1977, led to it having the fastest-growing economy in the OECD over the past two years, with real gross domestic products (GDP) rising by 5.5 per cent in 1977, and as much as 7 per cent last year. This was a remarkable achievement in a slow-growing international environment, the OECD says.

However, as a result of the tightening of monetary policy and the withdrawal of some of

the previous fiscal stimulus, prospects are much less bright from this year. The phasing-out of tax incentives is expected to moderate the growth of disposable incomes.

In 1979, GDP is expected to increase by 4 per cent, still high by OECD standards, but much lower than the 1978 rise of 7 per cent. With imports rising by 10.5 per cent in volume, compared with 8.5 per cent for exports, and import prices expected to increase by as much as 12 per cent, compared with only 8 per cent for export prices, the payments deficit is expected to widen to £145m (£413.5m), from only £150m in 1978.

The OECD Secretariat points out that a temporary increase in the payments deficit was expected under the national development programme, but that the programme could not have foreseen the effect of higher oil prices, estimated at about £95m in 1979.

Stewart Dalby adds from Dublin: The Irish Government has given no official figure for inflation, but ministers will admit in private that it is probably running at 12-15 per cent.

Mr. Martin O'Donoghue, the Minister for Economic Planning and Development, seemed relatively cheered by the gist of the OECD report. He said: "It shows that relatively speaking the Irish economy is doing well."

He added: "Just how well we actually do depends on our own performance at home. And if we repeat the series of strikes of the first half of this year we will be in poor shape as we go into the 1980s."

Tanker owner Reksten on trial

BY FAY GESTER IN OSLO

MR. HILMAR REKSTEN, the Norwegian tanker magnate, goes on trial in Bergen today for a long list of alleged tax and currency offences, most of them involving shipping companies outside Norway. The substance of the charges is that profits from lucrative tanker deals early in the 1970s were channelled to companies registered in tax haven countries, thus enabling Reksten to evade several hundred million kroner in tax.

The 81-year-old ship owner, who is ill, poor health, has warned the authorities that although he will attend the trial in Bergen's municipal court, he will remain silent. He intends to save his strength and his arguments for the inevitable subsequent hearing in a higher

court, where the verdict will be pronounced not by a judge but by a jury.

Reksten's defence counsel is also expected to stay silent during the trial for which the prosecution has called 33 witnesses, many of them from abroad.

Today's case has taken three years to prepare. A Bergen court indicted Reksten on tax and currency charges in June 1976 following accusations by the Bank of Norway and the Inland Revenue.

The court previously refused to give police access to a file which lists the Reksten family assets all over the world — a

document which the Norwegian Press has christened the "black book."

The case against Hilmar Reksten has political overtones. His shipping companies in Norway which have been losing money all through the tanker slump are big borrowers from Hansa Bank of London. These loans have been guaranteed by the state-backed Norwegian guarantee institute. Critics in Norway's left wing Press have complained that "taxpayers' money may have to be spent to rescue Reksten companies while the Reksten family itself probably has extensive secret assets abroad.

Colony cuts loan growth

BY PHILIP BOWRING IN HONG KONG

BOWRING TO pressure from a worried government, Hong Kong's Exchange Banks Association, the cartel of leading banks, announced on Saturday another 1.5 per cent increase in the prime lending rate to a new record of 14.5 per cent.

Deposits rates were increased by similar amounts so they now range from 9.25 per cent for three months and savings deposits to 12.5 per cent for 12 months.

The association said it was responding to both market and monetary conditions.

It noted the recent increase in interest rates worldwide.

However the extent of the rise indicated an attempt at stock tactics to deter loan growth. Credit has grown at over 46 per cent over the past year.

Despite a succession of interest rate rises taking prime from only 6 per cent a year ago and government appeals for slower loan growth, June figures showed lending still growing at an annual rate of about 36 per

cent. Critics have accused the banks of moving very belatedly, both to raise interest rates—the last rise was in April—and continuing to grant big loan increases.

Whether the new rate rises will bring a rapid reduction in credit growth remains to be seen. There is a feeling that it will dampen spending on consumer durables, but the banks are already overextended to loans to the building and property sectors so may continue lending to increase lending to meet these commitments.

At the same time property developers and home buyers are unlikely to be prepared to leave buildings uncompleted.

The interest rate rise is likely to cause the HK dollar, which has been firm in anticipation of an increase to recover further but the stock market is likely to see an abrupt end to its recent Indian summer. Hong Kong now faces both record interest rates and a weakening export

MENACE, MYTH OR MAGIC FORMULA?

see page 5

WORLD TRADE NEWS

WORLD TEXTILES

Italy reacts against French imports curb

BY ROBERT MAUTHNER IN PARIS

THE ITALIAN Government intends to lodge a complaint with the EEC Commission in Brussels regarding the recent decision by France requiring importers of sweaters to apply for "authorisation" before bringing the goods they have purchased into the country.

This was stated by Sig. Guido Artoni, the president of the Italian Textile Industry Federation, in an interview with the French economic newspaper Les Echos, in which he also expressed the opinion that the Italian

Government would take reprisals against some French exports to Italy.

The French authorities last week introduced what they described as a "technical visa" for imports of sweaters from OECD countries, which appears to be contrary to EEC regulations, particularly since the Commission's prior permission was not sought.

Officials emphasised, however, that this measure was aimed purely at monitoring the quantities of sweaters involved and their country of origin. Import licences would

be automatically granted on request, they said.

It is nevertheless clear that such a market existed in Italy. But, he claimed, that it represented only a very small proportion of textile manufacturers and that its production was destined mainly for the domestic market and not for export. Moreover, the cost of an hour of labour in the official Italian textile industry was higher than it was in France, he said.

The main reason why the Italian textile industry was more competitive than that of its European neighbours was its modern equipment.

U.S. renegotiation moves worry Asia

BY PHILIP BOWRING IN HONG KONG

HONG KONG, South Korea and Taiwan are becoming increasingly worried over U.S. pressure to renegotiate bilateral textile agreements to make them even more restrictive.

The U.S. pressure to go back on agreements concluded under the Multifibre Arrangement which are less than two years old may harden the attitudes of developing countries generally at Geneva where talks on trade "safeguards" are taking place.

Ironically, the U.S. pressure on its three largest developing country suppliers of textiles and garments comes at a time when European countries are up in arms against an alleged U.S. invasion of their synthetic fibre and fabric markets.

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However they are well aware that pressure is intensifying. President Carter, faced with the combination of an election year and rising unemployment, looks likely to try to deliver a domestic sectional promise at the expense of U.S. international obligations.

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ers, the market is already weakening. Hong Kong's textile exports to the U.S. so far this year are down 16 per cent in volume terms. And Taiwan recently announced a marked reduction in quota utilisation rates for the first half of the year.

They will probably fight even harder against another outline proposal in the U.S. Administra-

tion paper. That is, to link quotas in one year with the previous year's trade.

According to the U.S. paper if a quota level was only partly used one year, the next year it would be effectively reduced to the level of the preceding year's trade plus one half of the amount of the unfilled quota.

Supplying countries see this as a formula for gradual but enforced retrogression in trade. Even in a good year, overall quota levels are never fulfilled because quotas often exist in categories for which there is weak demand or the supplier is not competitive.

For example, last year, which was a good one for textiles, Hong Kong's quota to the U.S. was about 80 per cent fulfilled. This year the figure is likely to be down to 70 per cent as the market has weakened. Any system basing quota levels on the pre-

vious year's actual trade will be made out.

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Record Irish trade deficit

Moderate rates for tankers

BY STEWART DALBY IN DUBLIN

IRELAND recorded a record trade deficit of £155m for the

Worsted mill to close as demand falls

BY RYHS DAVID, TEXTILES CORRESPONDENT

ILLINGWORTH MORRIS, the Yorkshire wool textile group, is to close one of its five worsted mills in Huddersfield with a loss of around 350 jobs, partly as a result of weak overseas demand following the rise in the value of sterling.

The company, Britain's biggest wool textile group with a labour force of about 9,000, is concentrating production of its Huddersfield fine worsted subsidiary at Kirkheaton, and is closing its Trafalgar mill at Huddersfield. The two mills employ about 760 people, including part-time workers.

About 400 will be retained after the Trafalgar closure, which is to be phased over the next 12 months.

Fashion trends

The strength of sterling has had a sharp drop in sales on most markets. In the first three months of the year, overseas sales of woollens were up in volume from 5.0m to 6.5m sq metres, but worsteds

showed a drop from 4.86m to 3.1m sq metres.

The industry has also been affected by higher imports of wool-textile yarns and fabrics and of finished garments into the UK. In June, numbers employed in the industry fell by a further 800 to under 54,000 against 58,000 a year earlier.

Restrictions

In response to pressure from the industry, new restrictions on imports of wooltops—combed wool for processing into yarn—from South America were announced last week. The Department of Trade said quotas had been negotiated with the EEC Commission on imports of tops from Uruguay.

A similar restriction on imports of tops from Brazil was imposed on August 1. This will limit them to 104 tonnes during the rest of the year, rising to 568 tonnes in 1982.

The EEC is also imposing quotas on imports from Poland into the UK of men's and boys' jackets. These have risen from 39,000 in 1977 to 97,000 in the first half of this year. The permitted limit for the whole of this year will now be 120,000 units.

Retirement bond sales top £1bn

BY TIM DICKSON

ALL-TIME sales of the National Savings Movement's index-linked retirement certificates reached the £1bn landmark last month. Receipts in July of £27.6m from the issue contributed to a net inflow into the National Savings coffers of £26.6m, or £72.3m, including accrued interest.

Net receipts for the month from the retirement certificates, which must be held for at least a year, and which are available only to men over 65 and women over 60, were the best so far this year. In the first four months of the 1979 financial year, they were more than

double the figure of the comparable period last year.

Receipts from the retirement issue are likely to be healthy this month, since anyone who buys them by August 31 will get the benefit of July's record rise of 4.3 per cent in the retail price index. Under the rules, the index figure to which the issue is linked is always two months behind the month when the purchase is made.

Elsewhere, the July picture was not so bright. Fixed-interest National Savings certificates, including the 18th issue, brought in a net £8.4m of new money, but premium savings bonds were disappointing with

Small firms report criticised

Financial Times Reporter

THE CONCLUSION of the Wilson Committee on financial regulations that there is no "systematic bias" against small firms in the UK financial system is rejected today by the Association of Independent Businesses.

In an assessment of the committee's interim report published earlier this year, the association says such a bias exists. "If the fortunes of the independent business sector are to be improved, that financial bias needs to be acknowledged."

The association, which claims to speak for 25,000 companies, including a quarter of those with a turnover of more than £1m, makes a plea for the Wilson Committee to make better use of the abundance of evidence and research material available to it. Otherwise, "a valuable opportunity to examine ways of helping the British economy out of its present predicament will have been lost."

The association stresses that taxation is important in any consideration of the finances of small and independent businesses. It suggests that, if an analysis of taxation has not been possible because of the Wilson Committee's terms of reference, "perhaps the Government could consider changing the committee's ground rules so as to expedite the work."

It welcomes the proposal to permit UK companies to buy back their own shares, and supports Wilson's interest in a new kind of small firm investment company and loan guarantee schemes.

Tobacco cash lottery decision challenged

BY DAVID CHURCHILL, CONSUMER AFFAIRS CORRESPONDENT

IMPERIAL TOBACCO'S "Spot Cash" instant lottery promotion for some king-sized cigarettes is again to be legally challenged.

The Attorney-General will ask the House of Lords to reverse an Appeal Court decision last March which declared the Imperial lottery promotion lawful in every respect. The Lords is not expected to consider the appeal until next January at the earliest.

The Lords' judgment will be significant for the future use of instant lottery promotions in a number of consumer product areas as well as grocery retailing.

Imperial has already re-launched the "Spot Cash" promotion, which offers smokers the chance to win cash prizes of £1 to £5,000. The cigarette packets include cards with several "wins" which, when rubbed with a coin, reveal whether a prize has been won.

The Attorney-General's decision to challenge the promotion is the latest move in a long-running dispute over the scheme's legality. Imperial launched the promotion last autumn for three John Player brands. Sales increased by about a third and a 50 per cent jump in market share followed.

British-American Tobacco—a major competitor—complained to the Attorney-General that the scheme contravened legislation governing lotteries. The matter was passed to the Director of Public Prosecutions who decided to initiate criminal proceedings against several Imperial executives.

Imperial sought a civil court ruling that the scheme was lawful and the criminal prosecutions should not go ahead. Although the High Court refused to make such a ruling, the Appeal Court ruled that the lottery was lawful. Lord Denning criticised the DPP for acting "out of hand."

The criminal proceedings have been dropped now that the issue is to be decided by the Lords.

Although the "Spot Cash" promotion has been re-launched, it does not appear to be enjoying as much success as previously. Imperial still, however, retains its overall leadership in the cigarette market, especially for the fast-growing king size sector, which now accounts for six out of every 10 cigarettes sold.

Imperial has some 45 per cent of the king-size market, followed by Gallaher with about a third and a 50 per cent jump in market share followed.

Storm in teacup over Britain's favourite drink

BY OUR CONSUMER AFFAIRS CORRESPONDENT

THE BRITISH tea and coffee industries, together worth more than £575m at retail prices, are locked in a marketing battle over which drink will prove more popular in the 1980s.

Holiday spending was thought to be responsible for the £12.3m outflow from the National Savings Bank ordinary account, while the investment account, which had a net increase of £8.7m, is expected to benefit from the new higher annual interest rate of 12½ per cent to be introduced next month.

The total sum administered by the Department for National Savings has now exceeded £12bn.

However, the Tea Council points out that while 51 per cent of households buy coffee

each month, 84 per cent still buy tea regularly. Coffee, although more expensive than tea, has annual sales of £225m compared with £250m for tea.

Tea sales, the industry says, have recovered from a decline of a few years ago caused by rising commodity prices, to become more popular again.

The future lies with teenagers and people in their 20s who will form the bulk of the beverage market over the next two decades.

Many young people consider tea an old-fashioned drink, although the tea industry has just spent £1m on an advertising campaign to persuade them otherwise.

LABOUR

Telephone workers likely to go back after offer

BY OUR LABOUR STAFF

MEMBERS OF THE Civil and Public Services Association involved in the Post Office telephones dispute are believed to have voted for a return to work after a pay offer averaging 17.20 per cent.

The executive of the Society of Civil and Public Servants meets today to decide whether to recommend an improved offer to their technical and supervisory staff, who operate computer centres at Harmondsworth and Leeds.

But an official of the society's Post Office Data Processing branch said yesterday that tele-

phone bills could still be delayed. Although management had expected the CPSA to end its 15-week strike, members of the CPSA were continuing their 18-week strike.

Without 80 key technical and supervisory staff who were in the SCPS, it would be "impossible to restore effective computer services," he claimed.

Mr. Gordon Blair, vice-chairman of the branch said yesterday: "Hopes of a resumption of work in computer centres on Monday are merely wishful thinking."

SCPS members had rejected the 17.20 per cent offer, and were prepared to continue the strike "for much longer."

• The cost of sending a first-class letter goes up today from 3p to 10p. Second-class mail rises by 1p to 8p.

The new tariff could be the last to be introduced without consumer consultation. The Post Office Users' National Council is to meet the Post Office and Government representatives soon to discuss setting up a "continuing dialogue" on postal charges.

Court staff in strike vote today

AN IMMEDIATE strike that might disrupt the working of London's magistrates' courts might be decided today at a meeting of nearly 500 administrative staff.

They will be told that the Home Office has refused their attempt to secure rises of up to 30 per cent by declining to discuss the claim.

The staff, members of the Society of Civil and Public Servants and the Civil and

which can only be designed to produce industrial ferment and to encourage our members to take strike action."

Mr. Alastair Graham, the association's deputy general secretary, said: "Members will be very bitter that a meeting has not taken place."

Any strike could be spread outside London by the Association of Magisterial Officers, representing 4,000 staff, halting maintenance payments and the issuing of summonses.

Perk cuts anger unions

GOVERNMENT

PLANS to crack down on perks starting with the company car will face violent trade union opposition. Mr. Terry Duffy, engineering union president warned yesterday.

"It is apparent to me that the Government seems to be hell-bent on making decisions without pre-notification or consultation with the trade union movement, and that makes us collision-bound," he said in a BBC radio interview.

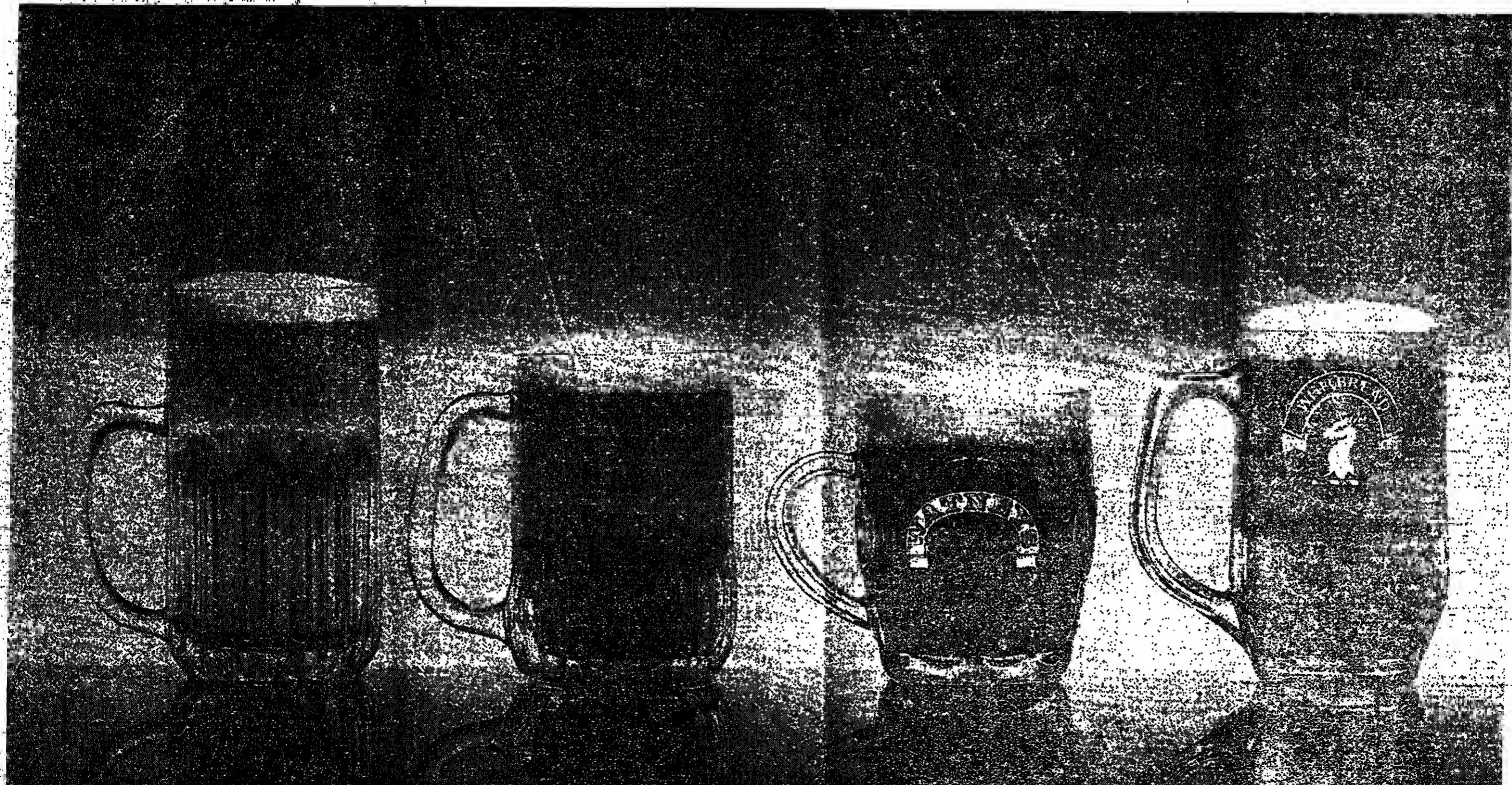
"I should imagine the trade unions will be reacting violently to these proposed cuts."

There were many industries where employees received a benefit as a condition of employment. If that benefit were taken away, Mr. Duffy imagined an "angry reaction" from workers.

Selling council homes would leave fewer council houses to rent and cause difficulties for farmers and farmworkers whenever a farmer needed vacant possession of a tied farm cottage.

THOUSANDS OF rural workers will become homeless if Conservative proposals to sell off council homes go through, Mr. Jack Boddy, general secretary of the National Union of Agricultural and Allied Workers, says in a statement today.

As the representative of hundreds of car workers, he forecast that Government action



Who builds the breweries where the brewers brew the beer?

A brewery is not a factory. It's a meeting place of traditional skills and modern technology. It has to be designed and built as an entity.

It's no coincidence that John Laing have been selected as the main contractors for four of the most modern breweries in Britain. The Whitbread brewery at Luton, the Harp brewery at Alton, Watneys

London's brewery at Mortlake are all completed. The new Courage brewery by the M4 at Reading is well advanced, and the first pints of Reading-brewed John Courage should be drawn in 1979.

However, Laing are much more than specialist builders to the brewing industry. This advertisement could have been built round Laing's special

knowledge of building cathedrals, with Coventry Cathedral and the new Roman Catholic Cathedral of Clifton, at Bristol, to their credit. Or docks, constructed from scratch in the Middle East. Or hospitals. Or oil platforms.

More than 20,000 people give Laing this special knowledge in so many diverse fields of construction. Collectively,

they make Laing one of the biggest construction companies in the world. However, size in itself is no virtue. At Laing we believe that our strength lies not in our numbers but in our capability.

LAING
make ideas take shape

UK NEWS

**Shortage
of hares
worries
sportsmen**

By Christopher Farley
THE NUMBER of brown hares in Britain is now at its lowest point for a century and urgent action is needed, the population is to be maintained at "a reasonable level," the British Field Sports Society has warned.

The sporting "big" has slumped and in some parts of the country, notably Wales and South-West England, the population is even below 2.5 hares per sq km, Mr Jim Scatford, the society's political secretary told the Guild of Gamekeepers (hare) Conference in Ontario.

The society was considering co-operating with the Game Conservancy on a research project, he said.

In France, where the population was "approaching breakdown," numbers were being kept by restocking. Some hares were being bred in captivity, but most were imported from Hungary and Poland and released to meet the demands of the country's fine shooting men.

In the first five years of the 1970s France imported 850,000 hares. The population in France averages four per 100 hectares of hunting territory, but it is close to nine per 100 in areas such as the Charente.

Italy has also had to resort to restocking and this year buyers have come to Britain looking for hares. The initiative has not been encouraged, Mr. Scatford said.

In Britain, shooting has been banned temporarily to allow the population to recover. The ban followed a four-year investigation there. In Poland, sporting guns are allowed to operate in only half the national shoot each year and this has helped preserve the hare population.

**Pit recruiting
drives success**

A RECRUITING company in North Wales has almost doubled its strength in almost as many months, helped by the 100 extra ploughmen needed to run canoes left by the National Coal Board's early retirement scheme.

The board said that in N. Derbyshire in the past three months, a third of all new starters had been experienced miners.

Civil engineers gloomy about future work

BY ANDREW TAYLOR

THE SLIGHT upturn in civil engineering work earlier this year appears to have petered out, according to the latest quarterly survey by the Federation of Civil Engineering Contractors.

The outlook for the coming months is likely to continue medium- and longer-term com-

panies would suffer.

The federation's survey of 214 companies, in July, showed that fewer civil engineers reported improved order books. Only 36 per cent of companies said that orders had increased compared with six months ago. In the last survey in April, 41 per cent said there were more orders.

While relative value of orders remained fairly stable, the workload in real terms deteriorated — 61 per cent of companies said that order volumes either declined or remained the same, against 56 per cent in the last

survey. More companies were pessimistic about prospects for the next 12 months, with only 15 per cent expecting new orders, repair and maintenance work to increase in the period.

Main indicators for the industry, orders and employment, had weakened since the slight upturn in work indicated in the April survey. This improvement was due to the catch-up of work after the harsh winter.

Only 13 per cent of companies expected employment to rise in the next 12 months, compared with 23 per cent in April.

Curb door dumping'

BY CLIVE INDUSTRIAL STAFF

THE WOODWORKING industry, which has a turnover of more than £100m a year, is urging the Government and the EEC Commission to curb the dumping of wooden doors in the UK.

Door imports In the first six months of the year totalled £4.237, close to the figure for the whole of 1978 (£75.401), which was already causing concern.

Fish farms run at loss

BY RICHARD MOONEY

THE FISH FARMS are running at a loss, according to a leading university study.

The study, by the university's agricultural economics and management department, initially covered about 400 farms. This was narrowed to 160 or so engaged in table trout production. Most others are chiefly concerned with restocking for angling.

Only 30 of the trout farms were considered of commercial value, the others as small "hobby" operations.

On those with output five to 10 tonnes a year, average production cost was calculated at 55p, and average sale price £2.50 a pound. In many cases costs were higher than returns.

Earlier this year, the Price Commission revealed that labour costs accounted for an average two-thirds of direct manufacturing costs in the company's 17 factories. British farmed fish output was low compared with other European countries. Rainbow trout production in Great Britain was 2,900 tonnes in 1976, against 15,000 each in France, Denmark and 17,000 in Italy. British production has since risen to about 4,000 tonnes.

Mr. Tom Dawson, chairman of the British Woodworking Federation's executive committee, said the level of imports was causing unemployment in the industry and threatening some factories.

Two-thirds of the imports are from Taiwan and Indonesia. Last year about 9m doors were sold in the UK, of which about 10 per cent were imports.

The review was announced to staff by Mr. Roy Watts, the airline's chief executive, in the latest issue of the company's newspaper. Mr. Watts said that he had "instituted a study of our route structure to ensure that to the maximum extent resources now used on any routes which are chronically unprofitable and non-strategic will be more profitably used to operate routes that give a good economic return."

The routes most at risk from the review are thought to be those between regional airports such as Cardiff and Southampton, which are operated mainly by Viscount aircraft. British Airways may consider phasing out these aircraft, which are based on 30-year-old designs, and scrapping the routes.

But the shuttle services between London and major regional cities such as Edinburgh, Glasgow and Belfast are believed to be profitable.

This view has been disputed by the Government-backed National Consumer Council and other bodies. The council has broadly welcomed the index as a useful indicator of spending power but has argued that the figures produced contradict the Treasury's claims about the

Loss-making air routes may be cut

BY FINANCIAL TIMES REPORTER

BRITISH AIRWAYS is carrying out a major review of loss-making routes and aircraft and seems likely to prune those services which consistently make losses.

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July trade figures out today

BY PETER RIDDELL

AN INDICATION of the monthly scale of the UK's current account deficit so far this year should be provided by the July trade figures, due this afternoon.

More companies were pessimistic about prospects for the next 12 months, with only 15 per cent expecting new orders, repair and maintenance work to increase in the period.

Main indicators for the industry, orders and employment, had weakened since the slight upturn in work indicated in the April survey. This improvement was due to the catch-up of work after the harsh winter.

Only 13 per cent of companies expected employment to rise in the next 12 months, compared with 23 per cent in April.

Government may have to boost money supply, brokers say

BY PETER RIDDELL, ECONOMICS CORRESPONDENT

THE GOVERNMENT may need to act in the coming year to ensure that the rate of growth of the money supply is not inadequately low. W. Greenwell, the stockbroker, considers that it is likely to be necessary to prevent the financial squeeze on industry and the recession from being as severe as that in 1974-75.

These will include adjustments for the impact of the civil service disputes which have disrupted the flow of information from some airports.

This should not mean a large undiscovered deficit, since the Department of Trade has already estimated that the published figures so far have probably understated the level of imports by £200m.

Consequently, the deficit between January and June was probably roughly £800m rather than £1.02bn as recorded to date.

This afternoon's announcement will attempt to adjust the figures back to January on a month-by-month basis for these distortions so there is no carry-over of understated imports beyond July.

The Department is likely to stress that while the figures will allow for distortions arising from the disruption to the information flow, the month-to-month outcome will still be distorted by sharp fluctuations in the flow of goods through ports in the first half of this year caused by the road haulage dispute.

Greenwell believes that the authorities will intervene at

an earlier stage in the coming recession than in 1974-75, and as a result the fall in the equity market will be much smaller this time than before, and the recession less severe.

The analysis assumes that if action is not taken, the financial deficit of industrial and commercial companies (excluding North Sea oil) might almost equal the worst of 1974-75 in real terms, or about 41 per cent of Gross Domestic Product.

However, given that property companies bore the brunt in 1974-75, the outlook facing non-property companies might be even worse than their experience in 1974-75.

The projections are based on those in the London

Business School's latest forecast, except that the brokers believe that public-sector borrowing in 1980-81 will be £3bn. That compares with £1.5bn in the Business School projections.

The firm believes that if sterling is broadly defined money supply grows at 10 per cent a year in nominal terms and the inflation rate peaks at 17 per cent this winter. In real terms, or about 41 per cent of Gross Domestic Product.

Consequently, the coming recessionary pressures should be similar to those of 1969-70 and considerably less severe than those of 1974-75.

WADHAM STRINGER

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Official Distributors for Rolls-Royce and Bentley.

H.A. FOX

34 Dover Street, London, Tel. 01-498 8862

1972 Oct. Rolls-Royce Silver Shadow II Saloon. Silver Sand, Dark Brown leather. Speedometer reading 650 miles.

1973 Oct. Rolls-Royce Silver Shadow II Saloon. Moorland over Pewter Tan, leather. Speedometer reading 7,100 miles.

1973 Aug. Rolls-Royce Silver Shadow II Saloon. Willow Gold, Dark Brown leather. Speedometer reading 12,000 miles.

1973 June. Rolls-Royce Silver Shadow II Saloon. Caribbean Blue, Magnolia leather. Speedometer reading 1,800 miles.

1977 Aug. Rolls-Royce Silver Shadow II Saloon. Champagne, Dark Brown leather. Speedometer reading 7,700 miles.

1972 Sept. Rolls-Royce Silver Shadow Saloon. Walnut, Black Everflex roof, Tan leather. Speedometer reading 250 miles.

1976 Aug. Rolls-Royce Silver Shadow Saloon. Walnut, Black Everflex roof, Tan leather. Speedometer reading 2,260 miles.

1976 Jan. Rolls-Royce Silver Shadow Saloon. Walnut, Beige leather. Speedometer reading 2,500 miles.

1976 May. Rolls-Royce Corniche Convertible Coupe. White, Dark Blue leather. Speedometer reading 32,000 miles.

1976 Feb. Rolls-Royce Silver Shadow Saloon. Walnut, Green leather. Speedometer reading 39,500 miles.

1976 Jan. Rolls-Royce Silver Shadow Saloon. Walnut, Beige leather. Speedometer reading 25,000 miles.

1975 Jan. Rolls-Royce Silver Shadow Saloon. Walnut, Beige leather. Speedometer reading 28,250 miles.

1975 May. Rolls-Royce Corniche Convertible Coupe. White, Dark Blue leather. Speedometer reading 32,000 miles.

1975 Feb. Rolls-Royce Silver Shadow Saloon. Walnut, Beige leather. Speedometer reading 36,500 miles.

1975 Mar. Rolls-Royce Silver Shadow Saloon. Walnut, Beige leather. Speedometer reading 39,500 miles.

1975 Jun. Rolls-Royce Silver Shadow Saloon. Walnut, Beige leather. Speedometer reading 42,000 miles.

1975 Aug. Rolls-Royce Silver Shadow Saloon. Walnut, Beige leather. Speedometer reading 42,500 miles.

1975 Sep. Rolls-Royce Silver Shadow Saloon. Walnut, Beige leather. Speedometer reading 43,000 miles.

1975 Oct. Rolls-Royce Silver Shadow Saloon. Walnut, Beige leather. Speedometer reading 43,500 miles.

1975 Nov. Rolls-Royce Silver Shadow Saloon. Walnut, Beige leather. Speedometer reading 44,000 miles.

1975 Dec. Rolls-Royce Silver Shadow Saloon. Walnut, Beige leather. Speedometer reading 44,500 miles.

1976 Jan. Rolls-Royce Silver Shadow Saloon. Walnut, Beige leather. Speedometer reading 45,000 miles.

1976 May. Rolls-Royce Silver Shadow Saloon. Walnut, Beige leather. Speedometer reading 45,500 miles.

1976 Aug. Rolls-Royce Silver Shadow Saloon. Walnut, Beige leather. Speedometer reading 46,000 miles.

1976 Sep. Rolls-Royce Silver Shadow Saloon. Walnut, Beige leather. Speedometer reading 46,500 miles.

1976 Oct. Rolls-Royce Silver Shadow Saloon. Walnut, Beige leather. Speedometer reading 47,000 miles.

1976 Nov. Rolls-Royce Silver Shadow Saloon. Walnut, Beige leather. Speedometer reading 47,500 miles.

1976 Dec. Rolls-Royce Silver Shadow Saloon. Walnut, Beige leather. Speedometer reading 48,000 miles.

1977 Jan. Rolls-Royce Silver Shadow Saloon. Walnut, Beige leather. Speedometer reading 48,500 miles.

1977 May. Rolls-Royce Silver Shadow Saloon. Walnut, Beige leather. Speedometer reading 49,000 miles.

1977 Aug. Rolls-Royce Silver Shadow Saloon. Walnut, Beige leather. Speedometer reading 49,500 miles.

1977 Sep. Rolls-Royce Silver Shadow Saloon. Walnut, Beige leather. Speedometer reading 50,000 miles.

1977 Oct. Rolls-Royce Silver Shadow Saloon. Walnut, Beige leather. Speedometer reading 50,500 miles.

1977 Nov. Rolls-Royce Silver Shadow Saloon. Walnut, Beige leather. Speedometer reading 51,000 miles.

1977 Dec. Rolls-Royce Silver Shadow Saloon. Walnut, Beige leather. Speedometer reading 51,500 miles.

1978 Jan. Rolls-Royce Silver Shadow Saloon. Walnut, Beige leather. Speedometer reading 52,000 miles.

1978 May. Rolls-Royce Silver Shadow Saloon. Walnut, Beige leather. Speedometer reading 52,500 miles.

1978 Aug. Rolls-Royce Silver Shadow Saloon. Walnut, Beige leather. Speedometer reading 53,000 miles.

1978 Sep. Rolls-Royce Silver Shadow Saloon. Walnut, Beige leather. Speedometer reading 53,500 miles.

1978 Oct. Rolls-Royce Silver Shadow Saloon. Walnut, Beige leather. Speedometer reading 54,000 miles.

1978 Nov. Rolls-Royce Silver Shadow Saloon. Walnut, Beige leather. Speedometer reading 54,500 miles.

1978 Dec. Rolls-Royce Silver Shadow Saloon. Walnut, Beige leather. Speedometer reading 55,000 miles.

1979 Jan. Rolls-Royce Silver Shadow Saloon. Walnut, Beige leather. Speedometer reading 55,500 miles.

1979 May. Rolls-Royce Silver Shadow Saloon. Walnut, Beige leather. Speedometer reading 56,000 miles.

1979 Aug. Rolls-Royce Silver Shadow Saloon. Walnut, Beige leather. Speed

Is this the only way to tell the public your story?

A guide to successful work:
"Corporate Advertising: Menace, myth or magic formula?" not only discusses the importance of corporate advertising, it also includes examples of successful campaigns.

Getting the right results: Corporate advertising is one part of your communications vehicle, effective corporate advertising not only informs and informs, it helps to relate your company to its customers in a more meaningful way, it can demonstrate your company's commitment to the community.

To help relate your company to its customers: It demonstrates your company's long-term commitment. And, obviously, it can also relate your attitude towards your communications policies.

FINANCIAL TIMES
EUROPE'S BUSINESS NEWSPAPER

Is this the right way to raise capital funds?

Sold: Some people will go to almost any lengths to raise capital funds. But, where all's sold and done, there's no room for strength, or originality, or imagination. And that's what you're looking for to be established before you can expect to succeed.

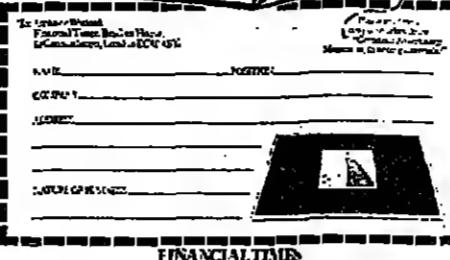
Advertising for the right results: Corporate advertising is one way of achieving that objective.

Intelligent use of a corporate communications vehicle: Effective corporate advertising not only informs and informs, it also helps to relate your company to its customers in a more meaningful way, demonstrating your company's commitment to the community.

Far from hindering your company's communications, it can enhance them. Now and in the future.

Getting the right results: Corporate advertising not only informs and informs, it also helps to relate your company to its customers in a more meaningful way, demonstrating your company's commitment to the community.

It demonstrates a long-term commitment: And, obviously, it can also relate your attitude towards your communications policies.

FINANCIAL TIMES
EUROPE'S BUSINESS NEWSPAPER

Is this the only way to talk to your workforce?

Sold: Some people still think the best way to communicate with their own workforce is to shout over them over the radio. And, equally, they believe that's how to go about it.

May be there is a better way of going about it: And, equally, there are other ways of communicating with your workforce.

Advertising for the right results: Corporate advertising is one way of achieving that objective.

Intelligent use of a corporate communications vehicle: Effective corporate advertising not only informs and informs, it also helps to relate your company to its customers in a more meaningful way, demonstrating your company's commitment to the community.

Far from hindering your company's communications, it can enhance them. Now and in the future.

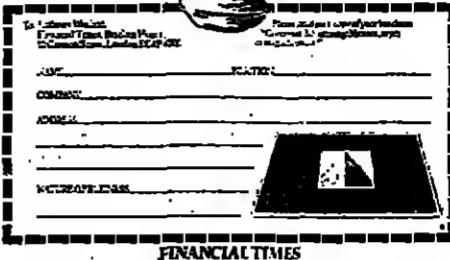
Getting the right results: Recognising the value of corporate advertising not only informs and informs, it also helps to relate your company to its customers in a more meaningful way, demonstrating your company's commitment to the community.

It helps relate to your company's workforce: It can relate to your company's workforce in a more meaningful way, demonstrating your company's commitment to the community.

Send for your copy now: You can get a free copy of this new book simply by completing and returning the coupon below.

It's a must-read for anyone involved in advertising: And, obviously, it has to be determined.

Which is why we've produced a book to help you get it right.

FINANCIAL TIMES
EUROPE'S BUSINESS NEWSPAPER

Is this the best way to woo your customers?

The same people attempt to win over customers, you'd think, because customers need products, factory makes them a service.

In truth, of course, business is a pretty down-to-earth affair.

Intelligent use of a corporate communications vehicle: Corporate advertising not only informs and informs, it also helps to relate your company to its customers in a more meaningful way, demonstrating your company's commitment to the community.

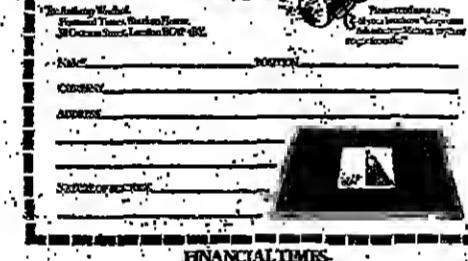
For those finding your company is becoming less popular, it certainly improves them.

Now and in the future.

Getting the right results: Recognising the value of corporate advertising not only informs and informs, it also helps to relate your company to its customers in a more meaningful way, demonstrating your company's commitment to the community.

It helps relate to your company: It has to relate to its audience. If it doesn't, long-term commitment. And, obviously, it can also relate your attitude towards your customers.

Which is why we've produced a book to help you get it right.

FINANCIAL TIMES
EUROPE'S BUSINESS NEWSPAPER

Is this the best way to lobby Government?

No doubt there have been stories where you've thought the business of the State is to improve local roads at the expense of your company.

Times, for example, when your company's decision to have a branch in a town is the decision of committee or MP's.

It's then when you've wished other had a clearer understanding of your business.

Put yourself through advertising: Corporate advertising is one good way of relating your company to its customers or even your government.

Intelligent use of a corporate communications vehicle: Effective corporate advertising not only informs and informs, it also helps to relate your company to its customers in a more meaningful way, demonstrating your company's commitment to the community.

These can assist the conduct of your company's operations.

Getting the right results: Recognising the value of corporate advertising not only informs and informs, it also helps to relate your company to its customers in a more meaningful way, demonstrating your company's commitment to the community.

It has to relate to your company: It has to relate to your audience. If it doesn't, long-term commitment. And, obviously, it can also relate your attitude towards your company.

Send for your copy now: You can get a free copy of this new book simply by completing and returning the coupon below.

We can guarantee that your audience will change the face of politics: We can guarantee that your audience will change the face of politics. When you've learnt from "Corporate Advertising: Menace, myth or magic formula?" you'll certainly alter your attitude towards your company's relations with the State.

FINANCIAL TIMES
EUROPE'S BUSINESS NEWSPAPER

Is this the best way to reach overseas markets?

"Corporate Advertising: Menace, myth or magic formula?" not only discusses the importance of corporate advertising, it also includes examples of successful campaigns.

It may not feel like it, for most, careful preparation is essential before success can be guaranteed.

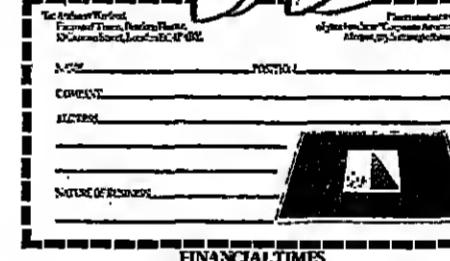
But remember: Corporate advertising is a sales communications vehicle, effective corporate advertising not only informs and informs, it also helps to relate your company to its customers in a more meaningful way, demonstrating your company's commitment to the community.

Intelligent use of a corporate communications vehicle: Effective corporate advertising not only informs and informs, it also helps to relate your company to its customers in a more meaningful way, demonstrating your company's commitment to the community.

And, most helpful of all, it provides you with a detailed checklist which you can begin to identify all those occasions when your company could benefit from a corporate advertising campaign, not only to demonstrate your standing in the commercial world.

Send for your copy now: You can get a free copy of this new book simply by completing and returning the coupon below.

We can guarantee that your audience will change the face of politics: We can guarantee that your audience will change the face of politics. When you've learnt from "Corporate Advertising: Menace, myth or magic formula?" you'll certainly alter your attitude towards your company's relations with the State.

FINANCIAL TIMES
EUROPE'S BUSINESS NEWSPAPER

Now you've seen our advertisements, isn't it time you thought about your own?

Above you see our six-part campaign for corporate advertising.

Below you'll find a coupon.

Fill it in, cut it out, return it to us, and you'll receive, free, one copy of "Corporate Advertising: Menace, myth or magic formula?"

It's a brochure which may

alter your attitude towards communications. Because, not only does it discuss the benefits of corporate advertising, it tells you how to go about it.

Send for it today. And start thinking, now, about how effective corporate advertising could improve your company's standing in a wide variety of ways.



Please send me a copy of your brochure "Corporate Advertising: Menace, myth or magic formula?"

NAME _____

POSITION _____

COMPANY _____

ADDRESS _____

NATURE OF BUSINESS _____

Technical News

EDITED BY ARTHUR BENNETT AND TED SCHOTTERS

Safety

Fast braking system

DYNAMIC braking equipment to stop most types of three-phase induction-motors of up to 5 hp, rapidly and consistently, comes from Tronic Electronic Services of Ulverston, Cumbria.

Equally suitable for operator protection or repetitive process control, this Dynabrake system is capable of emergency stopping a motor drive in less than 0.1 seconds. The braking period can be extended, if required, by the adjustment of a multi-turn potentiometer.

Dynabrake does not rely on conventional dc injection or mechanical methods to achieve braking. It operates, instead, on a precisely-timed phase selection principle developed at the University of Newcastle-upon-Tyne and is the first commercial exploitation of this development.

Self-excitation is induced at one set of stator windings, while low impedance path is introduced, by way of thyristors.

Tronic is at "Lund" Road, Ulverston, Cumbria, LA12 9BG, Ulverston 55550.

Protects the welder

HIGH LEVEL of protection, low weight, extreme comfort and wide visibility are characteristics of a new Airstream welding helmet announced by Racial Safety.

Intensive research and development work into new methods of protection demanded by many industries has led to the AEC MK3 and the version is a totally new Airstream with benefits of lung, eye, face and head protection tailored to guard welders against many of the potential hazards encountered in their work. The new model joins the Airstream family of anti-dust helmets of which over 60,000 are in worldwide use.

Better ultra-violet protection and a redesigned welding shield go with low weight, good balance and high visibility when the welding shield is in use.

The pivoted head shield is supplemented by a tough polycarbonate clear visor—giving protection to BS2091 grade 1—mounted underneath. When the head visor is hinged up for inspection or grinding/fitting, the clear visor remains in position to protect the wearer against dust and grinding debris.

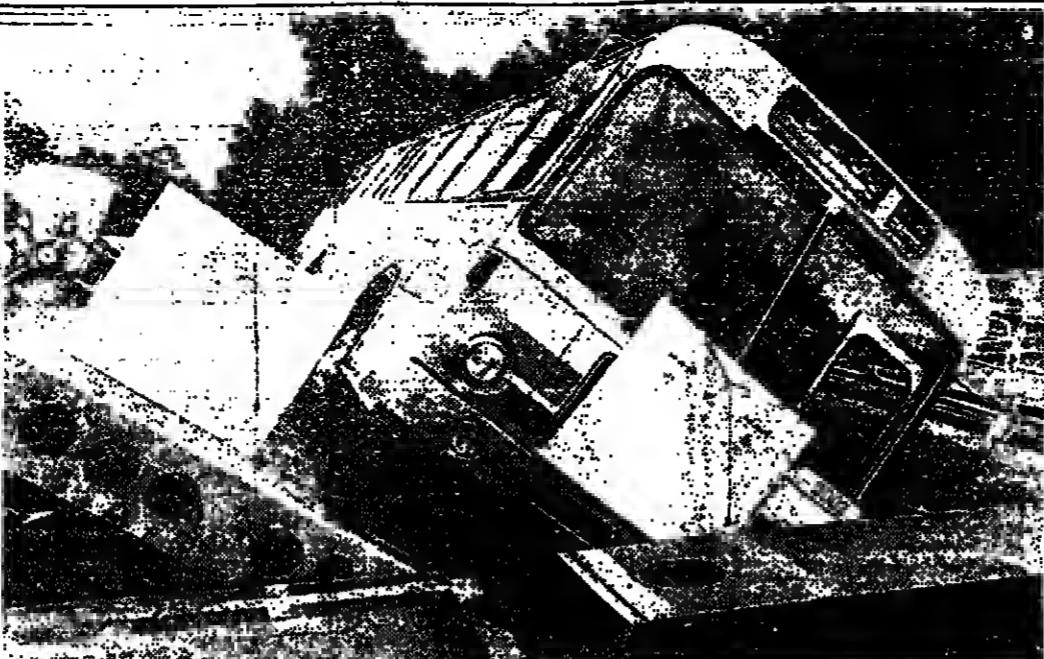
Further from Beresford Avenue, Wembley, Middx, HA9 1RU.

COMPONENTS

A brilliant display

SPECTRA-TEK has a new rail and an onboard dc/dc converter gives the 180 V discharge supply voltage. Options available are a 3½ digit panel meter type display or a 4 digit module; colon and decimal points are also available. The displays can be stocked in multiples of four digits in an integral bezel housing. Emphasis of particular digits can be made by varying filter colours.

Spectra-Tek, Outgang Lane, Pickering, YO18 7JA, 0731 72941.



A.M.N. 150-passenger Bendibus undergoing a 35-degree tilt test at the Military Vehicle Engineering Establishment at Chobham, Surrey. Five of these articulated buses are to be operated this autumn in Sheffield by the South Yorkshire Passenger Transport

Executive Built in Germany by M.A.N.-VW Truck and Bus, which has its UK headquarters at 261-365 Chiswick High Road, London W4 4HS (01-995 3131), the buses are each 17 metres long and powered by an 11.4 litre 6-cylinder underfloor diesel engine.

Computing

Processing problems solved

FOLLOWING THE launch in January this year of the personal computer hire facility by Aughton Automation, interest from the process field has been mounting. Since Aughton's own background is in process instrumentation hire and measurement and control system design and contracting, the company is able to combine those activities with microcomputing to offer complete pilot systems.

Typical applications include overcoming automation problems on small systems requiring a mix of sequence and continuous control, the establishment of experimental data acquisition and analysis systems, and the provision of peripheral "number crunching" facilities for laboratory instrumentation.

The computer hire service, first based on Commodore PET machines, has now been extended to include other microcomputers, including the ITT 2000/Apple, the Tandy TRS 80 and many powerful industrial microcomputers. Aughton also offers a sale and leasing service to determine the best microcomputer for any given

system requirement.

Software and hardware back-up for system design is being provided through an association with Dr. Malcolm Taylor of the Liverpool University Computer Laboratory. The Laboratory's Microprocessor Unit is supported by an ICL 1906S which holds cross assemblers and simulators for microprocessors including the 6800, 6800, 6800, 280 and the 8086 for development work.

Aughton Automation, Woodward Road, Kirkby Industrial Estate, Kirkby, Liverpool L33 7UZ, 051 548 6080.

Fast magnetic stripe encoding

EMI DATA, which claims to be the world's leading manufacturer of credit and security cards, has a new magnetic stripe card encoder: the MT-75.

The new unit may be used for small quantity encoding, verifying and modifying functions.

Normally, new data are entered into the MT-75's memory via a keyboard. The data being encoded appear on a visual display unit for checking. Input errors can be corrected by backspacing to the appropriate point and changing the incorrect information.

An integral microprocessor permits the programming of formats and constants into the memory, reducing operator intervention.

In its "verify" mode the

put to variable data only. A "repeat" key allows successive cards to be encoded with the same message.

For magnetic stripe encoding, each card is inserted into a guide slot. The machine's transport then passes the card over the write head. After encoding, the card is passed over a read head for automatic verification.

It is then passed into a card stacker for convenience when batch processing is taking place. The entire encoding and verifying operation takes less than one second. Any one of the three tracks on a card may be encoded and verified according to user's choice, with single insertion.

EMI Data, Alma Road, Windsor, Berkshire, SL4 3HA, Windsor 5311.

MT-75 will check that a valid encoding operation has been performed. The "modify" mode allows data already encoded to be changed. A single insertion of the card is all that is required.

The MT-75 is a self-contained desk top unit. It is similar in size to the average office typewriter. It is fitted with a security key lock to prevent unauthorised use and each unit incorporates non-resettable counters so that the number of cards entered and tracks validly or invalidly encoded or modified can be audited. The MT-75 works from any 240V 50Hz mains power supply.

ESAB, Beeching Way, Gillingham, Kent, ME8 6PU, Medway (0634) 34453.

design has a controlled low level of residual elements to mitigate hot, transverse and reheat cracking. The weld metal has a high notch toughness and creep rupture ductility. Low weld metal hydrogen potential and a low fume emission rate are other characteristics.

The first electrode is suitable for welding the 1 per cent Ni low alloy steel plate, pipe, forgings and castings used for combined high yield strength and good low temperature toughness properties in the construction of cryogenic plant to operating temperatures down to -40 degrees C.

OK 2CrMoB is also a basic coated, low hydrogen manual metal arc welding electrode but which deposits nominally 0.04 per cent carbon—24 per cent chromium—1 per cent molybdenum low alloy ferritic steel weld metal. The electrode coating is free of iron powder additions and deposits particularly clean weld metal, thus minimising undesirable ultrasonic reflections.

The electrode

Two superior grades have polythene outer coatings selected for their water-shedding properties. One is a clear polythene, the other is black for ready identification of the coated surface and to create a highly effective barrier against ultra-violet light, particularly desirable in certain exporting circumstances.

Developed in conjunction with the automotive industry, Tuwrap is supplied in sheets or rolls up to 1750 mm wide to minimise or eliminate the need for jointing and to reduce handling.

Carrs Paper, Shirley, Solihull, West Midlands B90 4LJ, 021-744 2215.

COMMUNICATION

Fibre optic cable

TWO TYPES of fibre optic cable, designed by Fibronics of Israel for both computer and general industrial applications, are now being marketed in the UK through the Data Products Division of Cole Electronics, 103-107, Lansdowne Road, Croydon CR9 2BN.

One type is suitable for computer-to-computer application while the other is a heavy duty cable able to withstand pulling forces of 100 kg and especially intended for industrial environments.

Both types of cable are made from plastic-clad fused silica fibre with an attenuation of less than 15 dB/km. They can be supplied with or without installed connectors in lengths up to 1 km or cut to order.

ESPLEY-TYAS

CONSTRUCTION GROUP

P.O. Box No. 6, Park Hall, Salford Priors, Evesham, Worcestershire, Tel. Bidford-on-Avon 3721 (20 lines). STD (078 988) 3721

£2m awards to C. Bryant

THREE PROJECTS, together worth £2m, have just been announced by C. Bryant and Son's building division.

Largest job is the second phase of a project at Heathrow International Trading Estate, worth more than £1m.

Second contract, worth about £1m, is to build a two-storey teaching block and a steel framed sports hall at Browns Hill Comprehensive School on behalf of Walsall Council.

Final work, worth £400,000, is for British Leyland and involves alterations, including demolition of structural walls and erection of new steel columns at BL's Gravelly Park Industrial site at Erdington.

Will build warehouses

TWO CONTRACTS for warehouses totalling £2.4m have been won by Fairclough.

The larger is a 15,000-square-metre development comprising three warehouses on the Griffin Industrial Estate at Totton, near Southampton. This is on behalf of the Midland Bank Pension Trust for whom JWL Project Services is acting as project co-ordinator. Value of the contract is £1.5m and the scheme has been designed by the Maurice Baguley Design Partnership.

The other contract, worth £820,000, has been placed by London and Leeds Investments.

Border wins £3.4m work

MEMBER OF the London and Northern Group operating mainly in the north west of England, Border Engineering Contractors has been awarded contracts exceeding £3.25m.

These include the construction of the effluent treatment works and pumping station at Workington for Thamesside Mills; the laying of the industrial water supply to Thamesside Mills and the trunk main Frizington/Cleator Moor for the North West Water Authority.

Henry Boot kept busy

Glasgow/Edinburgh road) Henry an award to Henry Boot Construction for the erection and completion of two single storey warehouse/industrial units in Nottingham for Electricity Supply Nominees is the largest of several jobs which add up to over £4.5m.

The units will have steel structural framework with block internal walls. Foundations will be of composite reinforced in situ concrete ground slabs.

For the Belld Housing Association, in conjunction with the Shettleston Housing Association, a two-part £1m job consists of a two-storey Sheltered Housing block containing 35 flats and fourteen one- and two-storey Fair Rent blocks, containing 50 terrace houses.

Following completion of Phase 1 of the AS Trading Estate, adjacent to the main

mains which will feed water from eight wells, into a reinforced concrete collection reservoir of 44,000 gallons (200 cubic metres of rock).

Consulting engineers are Howard Humphries in association with Arabtech.

At home, in the Oldbury area of the West Midlands, a prestige hypermarket complex is to be built for £7m by John Laing Construction.

The contract for a SavaCentre two-storey car park and other sites works at Freeth Street, Oldbury, has been awarded by SavaCentre, the joint venture between J. Sainsbury and British

Norwest Holst contracts

CONTRACTS, WORTH about £4.4m, have just been awarded to Norwest Holst, including a £2.5m job from the Strabag Regional Council for the construction of the first phase of the Garnock Valley sewer from Hillend to Waterside.

Work includes constructing and laying 4.25 km of 1350 mm internal diameter sewer at an average depth of 6.5 metres.

About a third of the sewer is in tunnel, the remainder in open trench. There are also three river crossings with associated manholes.

Also awarded by this council is a £605,700 project for the construction of a rectangular single compartment sewage reservoir in reinforced concrete

and laying 1.5 km of 600 mm diameter sewer.

For the Belld Housing Association, a children's residential hostel is to be built at Parks Wood, East Didsbury, Manchester for the Manchester City Council. It will provide three-storey pupil living accommodation, three-storey staff flats, two-storey administration and warden's flat, single-storey teaching accommodation, a basement boiler room and a tank room at third-floor level.

Start made on London IBM centre

MANAGEMENT contractor for the new central London marketing centre for IBM UK is to be

Monk wins £5m worth

FOUR contracts to A. Monk and Co., totalling over £5m, are to be retained by Northampton, Leeds and Salby. Over £4m worth of contracts have been secured by this group since March.

First of the new work is for the Northampton Borough Council and is a continuation of the Nene Valley Way high-speed trunk road, two stages of which were previously constructed by Monk in 1973 and 1976. Stage 3 is a £3.356.918 project, 2.3 km long, near to Shallow Heights water treatment plant.

Contracting at Avonmouth is valued at £609,500 and includes demolition of an existing Harry Weeden Partnership.

Housing for Partington

European distribution centre for Crosby Doors of Farnham Montague L. Meyer Group) says that the new building will incorporate the latest techniques of narrow aisle storage and retrieval, order picking and loading, with fully computerised systems of stock location, route planning and order processing.

Steady demand for industrial and commercial buildings is being sustained; a number of factory units are ready for handing over at the 20-acre Westpoint Industrial Estate the company is developing at Oldham, Greater Manchester, where Partington is based.

Recent successful tenders include one for 159 dwellings at Warrington New Town (over £2m) and two for wardens' controlled old persons' flats at Oldham, together valued at better than £1.1m.

A £3m home improvement scheme for Oldham Metropolitan Borough just started at Delf, Saddleworth, follows several similar contracts in various parts of Greater Manchester.

Rail depot at Clacton

BRITISH Railways Board, Eastern Region, has awarded a £1m contract to Tilbury Construction for the construction of a steel frame, aluminium-clad servicing and maintenance shed at the EMU train depot at Clacton Station, Essex.

The structure will be approximately 104 by 20 metres and the works include the provision of rail tracks and platforms. An extensive paved car park area and roads, a gas bottle store, associated drainage, services and site work are also called for in the contract.

Work will take two years to complete.

Distribution centre

cladding to Conder Midlands.

Crosby (member of the Montague L. Meyer Group) says that the new building will incorporate the latest techniques of narrow aisle storage and retrieval, order picking and loading, with fully computerised systems of stock location, route planning and order processing.

Swaffham bypass

DEPARTMENT of Transport has accepted a tender for nearly £3.350,000 for road works from Reed and Mallik.

It covers the reconstruction of a 4½-mile bypass from Swaffham, Norfolk, on the A47, at present a traffic bottleneck during the summer when thousands of holidaymakers head from the Midlands and the North to the East Anglian coast and the Broads.

Work will take two years to complete.

IN BRIEF

• Christiani and Nielsen has started work on Contract 11 of the Thames Flood Prevention Scheme at Thamesmead under an £8.4m contract awarded by Robert Watson and Company of Bolton.

• Higgs and Hill Northern has been awarded a £420,000 contract for the construction of a five-storey office block in St. Paul's Street, Leeds, for French Elst Developments.

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MANAGEMENT

EDITED BY CHRISTOPHER LORENZ



Donald Petersen, executive vice-president.

Ford sees its target for the 1980s as production of a 'rational' car

BY KENNETH GOODING

So it takes time for a group to build up its international operations. And it can take even longer before the work begins to pay off in financial terms.

Mr. Petersen maintains: "While this year's investments are making the news, the ever greater investments made over a much longer period of time are just now beginning to bear fruit for those companies which had the determination and foresight to invest carefully and steadily over the last decade and a half. These investments are not just in plants, but in sound, experienced management, strong and broad dealer networks and cars and trucks designed to serve the varied markets of the world."

It is time-consuming, and the returns on investments do not come immediately. Only in the past few years have Ford's overseas operations really begun to return the investment we have committed to our overseas affiliates, many of which have celebrated the 40th, 50th or 60th and, in one case soon, 70th anniversaries of their formal founding.

But then it has only been in fairly recent times that automotive market growth outside North America overtook that in the U.S. and Canada. Between 1965 and 1977 while the North American market was growing at around 2.5 per cent a year, the market outside was showing a 4 per cent improvement.

Ford in particular has been able to offset its recent problems in the volatile U.S. market by its overseas operations. The contribution of what are termed "international automotive operations" to total group profits for the first half of 1978 was \$170 million.

"You need a breed of skilled and sensitive management to handle this kind of assignment,"

And any company building up international operations also needs a healthy dealer network to take care of retail car sales, Mr. Petersen points out. The good dealers in most parts of the world are already committed to one particular manufacturer's products and will not be easily prised away.

The third article in a series on the concept of a world car looks at the strategy of Ford to the strategy of its major U.S. competitor and the way it has already put plans in hand for a new phase in its world car programme.

car assembly plant was built in Argentina. Between then and 1925 new assembly plants were started in Denmark, Spain, Brazil, Uruguay, Italy, Belgium, Sweden, Chile and Japan.

Through Ford of Canada, the Model T penetrated the British Empire with assembly in Australia, New Zealand and South Africa. By 1924 Ford had built and sold 10,000 Model Ts.

Today the Model T tradition is being followed by the Cortina (built in four countries and exported to 100), the Escort and the F-series trucks.

This is possible because Ford has long been established on the five continents and organises its production to reap the economies of scale this provides.

Two years ago Sir Terry Beckett, chairman of Ford UK, gave an indication of just how large these economies had become. He explained that Ford had compared the costs of producing a Cortina with those of producing a competitor close in terms of design, but only being built at a third of the Cortina's volume. The difference in cost, attributable to economies of scale only, was £170 per car.

Further stage

But in the 1980s Ford will take the "world car" concept a stage further, to what Mr. Petersen calls the "rational car". There will be many reasons behind their varied levels of appeal and performance from country to country. They are likely to be vehicles with varying levels of common components and often great similarity of design. But still there will be enough locally appealing features to make them desirable with customers in widely differing markets."

New vehicles being planned for the 1980s will have to be built not only multinationally but inter-regionally. "By encouraging specialised high-volume manufacture and sourcing of parts and components among countries con-



Ford Fiesta, the smallest car in its range and its first with front-wheel drive.

tributing to a final Ford product we hope to obtain superior quality as well as economies of scale that will mean competitive prices for Ford vehicles."

Mr. Petersen insists that the "rational car" holds advantages both for the companies and the countries that share in its manufacture.

For manufacturers it allows savings by reducing complexity and costs and substantially raising the overall quality of the product round the world. It brings to countries with what we call 'orphaned' products the newest and best in automotive technology, replacing older designs which otherwise we could not afford to change."

In this context he points out that, although Ford has no assembly facilities in France, it has a major presence in the automotive industry there through its Bordeaux trans-

mission plants.

Mr. Petersen maintains that there is a price to pay for this new way of operating and that price "may involve giving up the luxury of self-sufficient domestic industries surviving behind artificial barriers of tariffs and local content regulations."

Ford will have to spend about \$20bn between 1978 and 1985 to produce cars and trucks which will meet the stringent U.S. Government regulations.

Although the group would prefer not to have to spend so much so quickly, by doing so it will create a global pool of

technology and expertise that will be shared by all Ford companies around the world.

The pressures have made it worthwhile for Ford to set up computer links between its design and engineering teams in the U.S. and Europe so that they can compare notes quickly.

For manufacturers it allows savings by reducing complexity and costs and substantially raising the overall quality of the product round the world.

It brings to countries with what we call 'orphaned' products the newest and best in automotive technology, replacing older designs which otherwise we could not afford to change."

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mission plants.

Mr. Petersen admits: "It is difficult to make money on small cars in the U.S. because it is an open market and the Japanese have set the going prices." But he insists the Erica will be profitable in Europe.

In spite of its long history of international activity, Ford has still to complete one important piece of tidying-up. It is in the process of buying 25 per cent of Toyo Kogyo, Japan's fourth-largest car producer and number three in the commercial vehicle league, for around \$55m.

Mr. Petersen says the deal will achieve two things. It will cement the commercial arrangement between the companies—Toyo Kogyo, the Mazda car group, will supply Ford with manual front-drive transaxles

- Sales in 1978 outside North America—\$13bn (\$11.2bn).
- International Automotive Operations (IAO) net income in 1978—\$770m (\$705m).
- IAO's contribution to worldwide pre-tax profit rose from 7 per cent in 1971 to over 50 per cent in 1978.
- IAO accounts for more than one in every four dollars of Ford's worldwide sales.
- IAO accounted for more than one-third (\$8.3bn) of Ford's total assets in 1978.
- IAO has 48 major manufacturing and assembly facilities in 18 countries, with 80m square feet under cover.
- IAO employs more than 200,000 people, 45 per cent of total Ford products are sold in about 200 countries and territories by about 14,000 dealers.

for Erica and may also sell four-cylinder diesels for use in the same vehicle. An equity link will also help oil the wheels when the two groups get down to developing components jointly.

Validity

Then, although Ford is doing quite nicely in the Asia-Pacific area, it must be assumed that if the "rational car" concept has any validity Japan will remain the primary manufacturing base for the area. "The economical producers are based in Japan in the long run we have to assume that the present restrictions in the Asia-Pacific countries will diminish and the fundamental economics will come into play," says Mr. Petersen.

On its domestic doorstep, in Latin America, last year Ford had combined car and truck leadership in Argentina and Venezuela and truck leadership in Mexico. It has decided to pump another \$76m over the next two years into Argentina to expand capacity and upgrade the products, a decision taken after General Motors decided it had enough of manufacturing there and pulled out.

Both Brazil and Argentina have developed "internal" industries with high local content requirements and Ford, operating in both countries, has had to adapt to that. But there is potential for a good degree of co-operation between the two countries, Mr. Petersen maintains.

"Argentina is aware how high-cost and inefficient its industry has become because

it has cooperated with the government to show how a closed type of industry led to this. So new regulations have been promulgated and this will generate some activity and possibly some co-operation

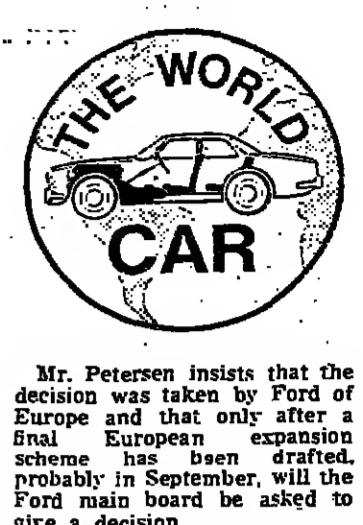
between Argentina and Brazil." Ford is also ready to adapt to the requirements of the Andean Pact countries—of which Venezuela is a prominent member—as they develop.

Europe remains the backbone of Ford's overseas operations and an area in which substantial investments continue to be made—\$300m in the Bridgend engine plant in Wales due on stream soon; \$700m over the next five years on engineering and product development in Germany, and \$1.3bn in Britain (including Bridgend) in 1978 and 1982 to increase capacity at Halewood in the immediate future, among other things.

But Ford has, amid huge publicity, decided not to go ahead with a new plant in Europe. Mr. Petersen says the question had always been whether Ford should first expand its existing European plants then follow with "greenfield" development, or go for the "greenfield" site first and then expand the current plants.

"The trouble is that when you are looking at the potential for greenfield sites in countries where you are not doing business at the moment it catches the public's eye. We did that part of the exercise in a goldfish-bowl type atmosphere.

"So when we finally decided not to go for a greenfield operation we thought we had better say so publicly and quickly."



Mr. Petersen insists that the decision was taken by Ford of Europe and that only after a final European expansion scheme has been drafted, probably in September, will the Ford main board be asked to give a decision.

He adds that Ford of Europe has done some recalculations in the light of what has happened in Iran. "We felt we had to put some weight on that factor in projecting future growth. We also re-examined financial cost projections."

His current projection is that world passenger car demand over the next ten years should rise by about 30 per cent and truck demand should continue to lie strong.)

Mr. Petersen insists that "in the long haul" Ford will be spending more on its overseas operations than General Motors.

Because Ford has had to find so much cash for the changes in the U.S. it is rumoured that the group has handed all export of capital from the States for the time being. Mr. Petersen points out that in the past ten years \$2bn was spent on the overseas operations—"all the cash was going in the other direction."

He expects competition outside North America to become progressively fiercer: not only because General Motors is now making a determined effort to improve its market share but because all of the top eight automotive groups are elbowing each other in an attempt to give themselves more room. A whole range of joint ventures will enable those smaller groups of less than 20 units a year to fight on the world battlefield.

"Because the huge sums needed to stay competitive, we are becoming accustomed to dramatic alignments and joint ventures with local capital. Some of these alignments seem to prove that it has now become cheaper in many countries to buy plants than to build them," Mr. Petersen suggests.

"Ironically, it may be that during the next decade some companies will be getting bigger in order that their cars become smaller."

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Wilson proposals 'will not revitalise firms'

WHILE THE interim report published by the Wilson Committee on financial institutions earlier this year has helped to draw attention to some of the problems of independent businesses "it falls a long way short of a comprehensive package capable of restoring the firms' viability."

This is the view of the Association of Independent Businesses, an organisation which represents about 25,000 firms and which claims to number among its ranks one-quarter of those companies in the UK which have a turnover of over \$1m.

The association's comments were contained in an assessment, published today, of the Wilson Committee interim report. Its criticisms and recommendations produce no real surprises. For example, the association reckons that, in contrast to the Wilson view, a bias against smaller firms does exist, and it also

argues that any fresh sources of external capital for small companies, or any loan guarantee schemes should be administered in the private sector, rather than by government.

The AIB strongly insists that the Wilson Committee's terms of reference should have allowed it to appraise the effects of taxation on smaller companies. It suggests that the new Government might even alter the committee's guidelines so that, before it produces its final report, it might make some recommendations in this area.

The omission by Wilson of any consideration of taxation effects was essentially due to the subject being considered "political". The AIB, however,

maintains that there are a number of questions about tax which do not fit into this political category. "The size of the tax take is a political choice; quite separately there is an efficiency choice to be made about the way any given

tax take is gathered," it says. Discussing the problem of bias against small firms, the AIB cites the Wilson Committee conclusion that such problems experienced by that sector as greater costs of loans, greater scarcity of external equity and minimum qualifying level in Government support schemes or export credit facilities do not necessarily constitute a bias. The AIB remarks: "We cannot agree: any structure which assists one part of industry and commerce more easily than another is by definition biased against the latter."

The financial bias must be acknowledged, but not by reorganising the well-tried financial structures which serve other purposes well. Instead, there should be a complementary bias elsewhere in the system.

A more liberal lending policy among the clearing banks

Nicholas Leslie

should also be encouraged, says the association. Provided the first money at risk is always the proprietor's, a bank could go somewhat further than it does at the moment.

The association wants a rather different form of financial intermediary to channel equity into independent business than that suggested by Wilson. It cites the U.S. and outlines a three point system as being worthy of consideration.

This system which has for the most part already been widely discussed—would allow Small Firms Investment Companies to take in privately subscribed capital; to augment capital subscribed as risk-bearing equity with borrowings up to three times the equity subscription; and give the right in change any losses arising on the realisation of such investment against income tax.

The financial bias must be acknowledged, but not by reorganising the well-tried financial structures which serve other purposes well. Instead, there should be a complementary bias elsewhere in the system.

A more liberal lending policy among the clearing banks

Nicholas Leslie

COMPANY NOTICES

GENERAL MOTORS CORPORATION

NOTICE IS HEREBY GIVEN that resulting from the Corporation's Declaration of a DIVIDEND of \$1.15 (gross) per share of the Common Stock of the Corporation payable on 13th September, 1979, there will be a record date of BEARER DEPOSITORY RECEIPTS a gross distribution of 575 cents per unit.

The Depository will give further NOTICE of the STERLING EQUIVALENT of the above distribution per UNIT payable on and after 17th September, 1979.

THE CORPORATION'S SECONDO QUARTER REPORT FOR 1979. Authorised Depositories are continuing in the distribution of this report to holders of Bearer Depository Receipts. Copies may also be obtained from Barclays Bank Limited.

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NOTICE IS HEREBY GIVEN that the TRANSFER OF 1,000,000 Ordinary Preference Shares at a par value of \$1.00 Argentine Pesos per share will be made on the 1st day of October 1979.

LOMBARD

Fastnet's tragic economics

By ANTHONY HARRIS

THE Fastnet Race has been tragedy enough; but the public reaction to it would well prolong the agony for all who love sailing. It is likely to reinforce the drift towards official interference in what is the freest of recreations and the most complete escape from City pressures that many of us can imagine. Yet the comment which has so far appeared seems to suggest interference of the wrong kind—banning small boats, interfering with the running of races; in short, as usual, seeking scapegoats and treating symptoms.

Philosophy

In fact a tragedy of this kind has been waiting to happen for some time. The reasons are partly technical—and so far as they are technical, they have already been beaten by the racing authorities, with results which should become apparent in future designs. However, the reasons are also partly related to the philosophy one could almost say the economic philosophy of the sport, and that has not changed radically. For the good of the sport, perhaps it should.

The elite of sail racing has always been and remains a sport for the very rich, since the days when Sir Thomas Lipton devoted some of the millions he had made in making retailing efficient (and incidentally cutting the urban cost of living by about a third) on campaigning his magnificent J-class yachts. The sailors in those days were largely professional; the rich contributed the yachts.

Ocean racing has happily become an amateur sport so far as the crews are concerned; but money remains at the root of it. The races are sailed under handicapping rules of the greatest complexity, which are intended to allow end to encourage innovation. Indeed, no serious contender can be designed these days without computer analysis of the rules, to calculate the trade-offs between the handicaps applied to various features and dimensions, and the possible speed to be gained, and probably the consultancy of a hydraulic research station too.

This process is naturally very expensive; but racing under restricted rules has been "democratised" by applying the same approach to progressively smaller boats. Within each class, however, it remains true that money has a lot to do with who wins the race. It is virtually never won by an old boat.

In two ways, this approach has courted danger. First, the acute rules have encouraged the development of what are in effect oversized racing dinghies, which skim over the water rather than cleaving through it. Such boats encourage the running of risks; for whereas traditional craft actually go slower if they are carrying excessive sail, as they "wallow" through the water, skimmers can be driven to the limit.

This fact should involve disconcert rather than risk to life in sound design, but competitive innovation has a further effect: the fine speed margins required depend on cutting weight and underwater drag to a bare minimum, slimming down keels, steering assemblies and rigging to the point of fragility. Designers as well as helmsmen run risks.

This seems to me still to attack the symptom rather than the cause. It is surely regrettable that sailing is made into such a money-sport by its rules, and effectively reserves the prizes for those who can afford a new craft to a new design each season. There is a clear alternative: the Olympic approach, seen equally in all dinghy classes, in which the major awards are won in classes of craft as near as possible identical, and are won solely by care in preparation and skill at the helm.

More sporting

Equally important, risk-taking at the design stage is effectively ruled out. If a class is to be built in hundreds, nothing must be fragile; the need for modifications and their cost would discredit the class. There is no good reason why such classes should not reflect modern thinking on fast sailing as it develops—the risks involved can be limited.

What is really lacking, however, is prestige. Here both the sailing authorities and those who spend such fortunes on their own competitive efforts could help. Sponsorship of a top class for one-designs would soon establish its prestige if it could attract the support of those who have a vested interest in the present more exclusive approach, and perhaps a fraction of the money they spend. All-comers' races would then remain simply what they once were—a bit of fun. In this way, not only would lives be saved, but the sport of kings would be more sporting.

5.55 Nationwide (London and South East only).
6.20 Kick Start.
6.50 Ask the Family.
7.15 Explorers of the Deep.
8.05 "Grand Prix," starring James Garner (part 1).
9.00 News.
9.25 "Grand Prix" (cont.).
11.15 World of Panorams.
12.45 am Region 1 News.
All Regions as BBC-1 except at the following times:
Scotland—5.55-6.20 am Reporting Scotland.
6.15-6.25 am News and Weather for Scotland.
Wales—1.30-1.45 pm Bill Pals.
5.55 Wales Today.
6.15-6.20 New edition.
6.50-7.15 Tomorrow's World.
12.05 am News and Weather for Wales.
Northern Ireland—4.18-4.20 pm Northern Ireland News.
5.55-6.20 Scene Around Six.
12.05 am News for Northern Ireland.

BBC 2
6.40-7.55 am Open University ('Ultra high frequency only).
9.50 Magic Roundabout.
9.55 Jackanory.
10.10 Doo and Pete.
10.15 Desert Adventure.
10.35 Take Hart.
11.25 Cricket: Third Test—England v India.
1.30 pm Trumpton.
1.45 News.
2.05 Cricket: Third Test. 4.15 Regional News for England (except Lancashire).
4.20 Play School (As BBC-2 11.30 am).
4.45 Jigsaw.
5.10 Big John, Little John.
5.35 The Wombles.
5.40 News.

Indicates programme in black and white

Lessons from the Rossmminster case

THE SECOND ACT of the Rossmminster drama was concluded last week in the Court of Appeal, by a judgment which gratified not only those who like to see the tax man defeated, but also those with a wider concern for the protection of the citizen against abuse of bureaucratic power.

One can assume that in addition to helping with the investigation of suspected tax offences, the raid on the Rossmminster premises could also yield information about the clever legal schemes that are being used by such successful practitioners. Without knowing about them the Inland Revenue can hardly propose legislative changes which would stop them.

The Revenue officers who carried out the raid in the early hours of July 13 were no Gestapo-type guerrillas but, as Mr. Plummer, one of the victims, testified "very nice chaps." One can hardly assume that the two Commissioners of Inland Revenue who authorised the operation could be described in any other terms. Yet circumstances seem to have prompted them to a "military-type" operation which ended in removing, in rifles, lorry loads of documents, some of which could possibly be used as evidence, if indeed there was any offence committed, and some of which had no relation to tax matters at all. And they have done so on the basis of warrants obtained the night before from a circuit judge and referring to the broadest of terms to the suspicion of an unspecified tax offence.

In a narrowly technical sense the judgment rested on the interpretation of the statute law which enables the Inland Revenue to obtain from judicial authority a search warrant if it can satisfy the judge that it has information justifying the suspicion of a tax offence.

Mr. Justice Walton, to whom Rossmminster appealed in the first

great general importance and equivalent to a constitutional rule of countries which have written constitutions and Bills of Rights.

However, until one has seen the transcript of the judgment (which is not yet available) it will remain unclear how detailed a definition of the offence is required by the Court of Appeal. If what is required is, to use

for an officer carrying out a search under common law for suspicion whether it is "reasonable to believe" that a certain piece of paper will be used as evidence of a suspected offence. Even experienced accountants may take weeks to establish discrepancies between such records.

One can hope that the House of Lords, to whom Inland Revenue will appeal, will clarify some of these issues. But a real remedy can come only from changing the method of tax legislation and of tax enforcement. Legislation should bring out more clearly the substantive intention of Parliament and shed the complicated cross-references which aim at precision but achieve obscurity.

Enforcement, it should be realised, is mainly concerned with a relatively small number of very large taxpayers. And here prevention might be better than cure: a system of regular audits and consultations in which Tax Inspectors were represented would not only take a better account of the rules, but people should be considered innocent as long as they are not proved guilty, but might—as German experience shows—achieve significant results for the Inland Revenue.

Court of Appeal, London. Rossmminster Group and others v. Commissioners of Inland Revenue, judgment of August 16, 1979, unreported.

THE WEEK IN THE COURTS

By A. H. HERMANN, Legal Correspondent

instance, took the view that the warrant need not say any more than just that. The three judges of the Appeal Court took a different view and, relying on previous judgments of the House of Lords and of the Court of Appeal, reaffirmed that it is a basic tenet of the English law that whenever a statute speaks so vaguely about "an offence" it should be read as implying the condition that when the statutory provisions are applied, the offence must be sufficiently specified to allow for judicial review.

Such a general implication, which is not much different from the generally accepted requirement that all decisions of administrative authorities must show reasons which moved those who made them, is of

Lord Simon's dictum of 1947 "specification of particulars of the offence," the decision may go a long way in protecting the citizen against fishing expeditions by the authority. If however, the appeal judges would be satisfied with the naming of one or several of the six categories of tax offences this would hardly help. Though these six categories include the specific offences of false accounting, forgery and perjury, they also include the very broad categories of evading tax liability and conspiring to defraud and cheat. The last offence is broad enough to support any fishing expedition.

It seems to be also well established by previous decisions of the Court of Appeal, particularly in *Ghani v Jones* that a police

Troy set for massive gamble over 10½ furlongs at York

THERE IS little doubt in my mind that the connections of Troy are taking one of the most massive gambles in racing history. In saddling the dual Derby winner over 10½ furlongs at York tomorrow.

A colt who takes a long while to get into full momentum and

RACING

BY DOMINIC WIGAN

one who was not only helped by a slightly ill-judged late bid by Gay Meece, pilot at Ascot, where a stumble also did not help the cross-Channel raider, Troy will undoubtedly need a fast early pace tomorrow if he is to win.

Brian Proctor, second stable jockey and the subject of unfair criticism over his riding in the King George VI and Queen

Elizabeth Diamond Stakes in which Road to Glory was simply not up to setting the required pace, again bids to fulfil that role on the Sir. Gaylord four-year-old.

With Lyphard's Wish, among others, almost sure to take them along at a blistering pace from the outset, I see little need for Road to Glory's presence, who seems ill-equipped for the role.

Those likely to take on Troy in the £50,000 renewal of the Benfleet and Hedges race include Gay Meece, Swiss Maid, Gain, Noeline and Mangin.

The reasoning behind Troy's presence looks obvious. Although some reports suggest that breeders have been easier to snap up shares at £150,000 each (valuing Troy at £7.2m), a victory would undoubtedly encourage those still uncommitted to back the stallion prospect and—hopefully—ensure his presence at stud in Britain rather than in the U.S..

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THE ARTS

Architecture

The State of the Art by COLIN AMERY

There is something very touching about the remark made in the current issue of the Royal Institute of British Architects Journal. "Current British Architecture is enjoying enormous popularity overseas. What do they mean? Are British architects secretly building masterpieces on far flung foreign shores? Or, are hordes of foreigners rushing to take package tours around the centre of Birmingham?"

Alas, neither explanation is the right one. The fact is that a few foreign critics and architects have decided that they are tired of the waywardness of much that is new in Japan and America and on taking a look at new architecture in Britain see encouraging signs that some of the traditional architectural virtues are alive and well.

It was the annual announcement of the RIBA Architecture Awards that prompted the Institute to wheel in the foreigners to defend the profession in Britain. I wonder how many natives would agree with their verdict?

The RIBA Awards provide a good opportunity to survey the British architectural scene and this year they are particularly revealing. Four recently completed buildings received full scale awards and sixteen were commended. A look at the four winners is perhaps enough to test the quality of current buildings and to attempt an assessment of the state of the art.

Of the four winners only two are full-blooded new buildings, the other two are a magnificent cathedral that was conceived in very different times and a revamping operation on a Victorian theatre.

The two new buildings are both offices and both in the country: Gateway House in Eastgate, designed for the Wiggin Teape paper group by Arup Associates, and Winslade Manor, new offices adjoining an old house for the London and Manchester Assurance Company near Exeter designed by Powell, Moyes and Partners.



Liverpool Cathedral

The award jury praise Gateway House for its "bold gestures at a more humane approach to a large headquarters office building." The building is a low terraced arrangement with a striking series of rooftop gardens that are so disposed to provide verdant views from every office window. Gone is any sensation of a cliff of offices. Instead there is the pleasing effect of half a zigzag sprouting with greenery.

Inside the offices are a mixture of large open plan spaces and a series of more private rooms. The interior reveals the quality of the structure which is a series of pyramid shaped roofs supported at each corner by concrete columns. Nothing is remarkable about this but a regular and pleasing series of shapes that reduces the blank emptiness that overwhelms so many large offices. This is a building of consistent quality.

not one to make your heart leap with excitement but of a standard that should be basic for all new buildings.

Much the same sort of feelings are aroused by the other award winning office building, Winslade Manor is an example of architectural good manners. It is really a giant service wing to an existing 18th century country house. As an exercise in scale it succeeds because the integration of a large new building with the house and stables adds effectively to the final setting.

The two and three storey additions are uncompromisingly modern, built of reinforced concrete with a colonnade of columns around the perimeter. They fit well into the older setting because they have some of the virtues of the 18th century house, like simplicity of detailing and a restrained use of materials.

So far so good. It is possible to see how committees of architects found serious virtues in both of these buildings. There is also no doubt that the people who work in them find them agreeable and that they provide minimum environmental standards that should be provided by all large corporate employers.

But are they really distinguished pieces of architecture? I suspect that most people would say that they liked them well enough but they would not be likely to travel far to see them.

This is not the case with the third award winner, Liverpool's Anglican cathedral. This is undoubtedly a great building, a rarity, a place set apart. It is brave and right of the RIBA to belatedly acknowledge Sir Giles Gilbert Scott's masterpiece. It has been building for 75 years and now stands as a vindication of Scott's belief that you can interpret historic styles

in a free and original way. To visit the Roman Catholic cathedral by Sir Frederick Gibberd in the same city is to see the true poverty of the modern style when it strives for meanings that are outside its range. The award given to Liverpool reflects the new climate in architectural thought. It is no longer a sin to look at history and no longer criminal to design buildings that not only refer to the past but actually rely on tradition.

The building that took a fourth award is the Theatre Royal in Nottingham. It is a standard Victorian theatre that has been refurbished and added to by the architects, Renfrew Howard and Lewis Partnership. The remarks of the jury are very informative about their feelings for architecture at the moment. They say the architects have created a delightful unit "where the question of which is old and which is new hardly arises." Not so long ago the cries of "pastiche" would have been ringing around the RIBA because the architects spent a lot of time and money at Nottingham recreating the Victorian detail of much of the interior. There is no doubt that they learned from the old building and were not ashamed to imitate its virtues.

What the awards show is that the profession is beginning to appreciate there is a wind of change blowing through modern architecture and that the heavens are being pumped, not really by the architects, but by the public who are gradually blowing architecture back on to a more familiar course. I think most people would agree that a true understanding of the nature of architecture leads inevitably towards a respect for tradition. Now the profession which awards these prizes to itself every year is also showing encouraging signs of a change of heart. Architecture must respond to and reflect society and architects do now realise that our everyday needs are not as simple as they once thought.

The work has dated. Champagne is no longer a symbol of ultimate hedonistic abandon; drunkenness is no longer a cause of universal mirth; and the second-set festivities, at least as generally presented today, no longer look much fun. The contrast with Offenbach's best operettas is instructive, for with similar dramatic impediments, they can still sway the senses through the dangerous wit, verve, and gaiety of their music.

The music of *Die Fledermaus* is not like that. It is beautiful, luxurious and fertile in invention, full of good humour expertly imprinted on the notes; but it is essentially soothing, unchallenging.

Perhaps if the scuder, seamier aspects of the characters were allowed sharper focus, this might add a squeeze of lemon juice to the rich, creamy nectar. At the Coliseum they are all played as nice people, good-looking and young-looking, having a jolly and essentially decorous time. Orlowsky's hall is, in fact, not all that jolly — the chorus stand around a good deal, providing a stage audience to the activities of the principals rather than participating as fully paid-up guests. The production is not coarse, and for that we should be grateful; at its best — in the opening scenes and in the prison scene, often a good deal longer-winded than it seemed on Thursday — a comfortable frame is set up around some very comic acting. It is an exceptionally pretty frame. Tim Goodchild's designs, Biedermeier in

pearly grey and pink, later in black and white, all with lace trimmings, also hold the promise of longevity, which is high up on the list of an ENO opera's requirements.

New to the company are Anne Pashey's Orlowsky and Clive Dunn's Frosch, both gratifyingly successful traversals of mine-taught fields. Miss Pashey's princeling, got up as a mustachioed cross between Marcel Proust and Gérard Chaplin, does not ape male manners; it re-invents them. With dash and great address, Mr. Dunn plays his long scene as a music-ball episode, minutely detailed and choreographed. That we accept it as such, and not as a tedious delay of the denouement, is a measure of his achievement. He played with Eric Shilling's prison governor, a disarming collection of all Mr. Shilling's best-loved stage devices, as though the partnership were of long standing.

Rosalinda is Luis McDowell, gorgeous to look at, good with the spoken tilf if not always with the snig words, grandly carried and at the same time self-mocking in the way that belongs to operetta leading ladies. She was not in best voice; the Csardas was hard and strained; Mardon Hill Smith's pert Adele little too frequently given to doll-like mannerisms. David Hillman's personable Eisenstein, and Geoffrey Pogson's fresh and funny Alfre II deserve more attention than they can be given here. The conducting of Ian Reid, though it reminded us of the Schubertian grace in the spring, tended to lethargy, and showed a less than complete comprehension of that most difficult of arts, the Viennese rubato. As always, there is a handsomely full edition of the score at the Coliseum, complete with ballet

music (shakily danced though it may be).



Leonard Part

Lois McDonald and David Hillman

Theatre Upstairs

Carnival War a Go Hot

by MICHAEL COVENEY

The Royal Court's main stage is dark at the moment, but the English Stage Company's best new plays of the year continue to emerge at the top of the stairs. After Wallace Shawn's waspish threnody of New York dissipation, Michael Hastings chips in with the best English costume farce since Joe Orton's *What The Butler Saw*.

The recommendation, put like that, needs elucidation. Roger Glossop's design consists of the interior of a green military bus on the fringe of a recent Notting Hill carnival (Merlyn Rees was Home-Secretary, Chelsea at home to Norwich). Into it are crowded three policewomen. Literally stripped for action, they are joined by three young soldiers, another element in the combined operation of law and order. A black policeman, in the job merely for money (what else?), boasts of his role of sops to the media. The whole company is overlorded by a civilian instructor in "counter operations." A long-haired hippie reveals himself to be a Detective Sergeant from Twiss Hill when

he springs to action in the play's first violent outburst; one of the lads has taunted the copper about being a black member of the law-enforcing establishment.

The play is cunningly developed as both an exercise in internal relationships and a study of this ragtag corporation's attitude to the outside world, dimly represented by the distant throb of steel hand.

Expectations are continuously undermined, the audience never allowed to draw final conclusions about what the uniform or lack of it, implies.

In this respect, Mr. Hastings

has written a comedy more complex than his successful *Glo-Joo* and, in its stunningly evocative and physical climax, much more daring. The chief girl, having bemoaned her lot of being taken for a sexual reject or even a lesbian, reveals herself to be just that. The virginal young soldier about to be drafted to Ulster finds sexual gratification on the back seat of the bus. The others dance. All join in the chorus of Rod Stewart's "Sailing."

Susan Hampshire to star in *Night and Day*

Susan Hampshire takes over the leading role from Maggie Smith in Tom Stoppard's award-winning play *Night and Day* at the Phoenix Theatre on September 10. Maggie Smith leaves the cast to head the American production which opens on Broadway in November.

Schreier recital cancelled

Peter Schreier is indisposed with a throat infection. His recital tomorrow night in the Queen Elizabeth Hall is cancelled and will be replaced by a chamber music concert with Pinchas Zukerman, Eugenia Zukerman, Yehudi Menuhin and Yo Yo Ma. Marc Neikrug and Nancy Allen in works by W.A. Mozart, Xavier de Mau, Faure, Ravel and Dutilleux.

Exhibition of sporting pictures

The thirty sporting pictures recently presented by Mr. Paul Mellon at the Tate Gallery, which it was to have been shown next winter are now on view at the Tate Gallery until Sunday, September 30.

This gift, made through the British Sporting Art Trust, includes two paintings by Stubbs.

This was a return to the mammoth festivals where everyone goes through the paces, and being there is more important than enjoying yourself: it is at odds with "new wave" immediacy and not surprisingly the audience was old. Who fans rather than new Mods. They certainly enjoyed seeing Pete Townshend and Roger Daltrey perform again, like over-wound puppets, the same convulsions that created the Who legend more than a decade ago; they

were reassured at the presence of John Entwistle, the frozen bass man whose immobility almost steals the show from the surrounding frenzies; and probably missed the uncontrollable spasms of the late Keith Moon, even though the replacement drummer Kenny Jones (from the Small Faces) laid down a solid solid rhythm.

ANTONY THORNCROFT

CRICKET BY TREVOR BAILEY

How to avert spectator disaster

WITH ONLY a limited amount of play on the opening day and none on the Friday or the Saturday, it seems almost certain that for the second successive year the Headington Test can be written off as a cricket, financial and spectator disaster. Once again, there was plenty of time to wonder how the game came to be invented in this country, and whether something can be done to assist the long-suffering spectator when the weather turns really mean.

Spectators would unquestionably receive more value for their money if the umpires and players were prepared to interpret "playable" more literally, and accept conditions that were less than perfect. On Saturday the pitch was dry, the square firm, and the weather fine, but the match was abandoned for the day because a comparatively small section of the outfield was bog-like.

Cricket could have been taken place, but one must sympathise with the umpires, in the unenviable position of sole judges of what constitutes reasonable playing conditions.

Their job depends, it must be

remembered, on the marks they receive from the captains, and they are only too well aware that professional players are inclined to be fussy about conditions unless these happen to suit them.

For example, at the Oval in the Prudential International against Australia both teams continued, in a big thunderstorm to finish the match and avoid turning up next day. No talk about the danger of slipping and pulling a muscle.

One suspects less play would be lost if at Test grounds there were an independent administrator with power to act, and whose first duty is to the public rather than to the players.

Another way to provide more cricket to recompense the spectators who has paid, but seen nothing, and to lessen the chances of a draw, which in the present contest has become almost certain, would be to employ the rest day whenever more than six hours were lost in the first three days.

This move would be approved by a marketing man until it dawned on him that Sunday with

the largest audience potential of the week, is the rest day.

Logic and money suggest that a Test in this country should start on Saturday with the rest day on Tuesday, but this would not appeal to John Player, who sponsor the Sunday league largely because of television coverage.

Directly or indirectly, sponsors must influence the decision-makers in every professional sport.

Though there has been a shortage of cricket at Leeds there has been no shortage of talking points, and plenty of time to discuss them. Alec Bedser and Ken Barrington have been appointed manager and assistant manager for the forthcoming visit to Australia.

England are due to play three Tests against Australia this winter, participate in a limited-over knockout competition, and have one Test in India on their way home.

India are due to play no fewer than 13 tests at home, which supplies the motive force for even the most enthusiastic fol-

lowers of the game in the world. The welcome increased popularity of the counties as a result of increased sponsorship seems to have been accompanied by a noticeable decline in standards of the clubs.

The sacking of Smedley in mid-season was hardly an advertisement for loyalty and diplomacy. On Saturday, Tony Lewis, who possesses a deeper knowledge than most, learned second-hand, following a newspaper revelation, that he and Jim Pleasants, who had been a first-class player, had been sacked from the cricket committee by the full committee.

The way the matter was handled, by a body whose combined cricket expertise at a serious level one must have some doubts about, had endorsed my belief that too many counties are run by well-intentioned men who do not know what first-class cricket is all about and, even worse, imagine they do.

There also appears to be an increasing number of people on cricket county committees seeking the reflected glory which supplies the motive force for even the most enthusiastic fol-

TENNIS BY JOHN BARRETT

Some vintage play from the veterans

THANKS TO indoor courts in Manchester and London, two national competitions at opposite ends of the tennis spectrum were completed last week on schedule.

At the northern LTC in West Didsbury, the under-21 championships, normally played on grass, were saved by the Tennisquick indoor court there and three others at nearby Stalybridge.

The favourites, both former winners adapted to the change of surface without difficulty. Michael Appleton, the Cambridge blue of Lancashire, the holder, defeated Scotland's Donald Watt, 4-6, 6-1, 6-1.

To underline his claim that university studies need not necessarily disrupt a tennis career, Cathy Drury, of Lincolnshire, regained the title she first won in 1977 by defeating surprise finalist Eleanor Lightbody of Wales, 6-1, 8-3. The workmanlike Miss Drury has proved before that she can win relatively minor tournaments in Britain and the rest of Europe.

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When the championships

were first held in 1975, the three champions, only three Worcestershire left-hander, Fred Field, became the first over-45 champion. On Saturday at Wimbledon he won again, and against the same opponent, but not before the former Queens Club chairman, Clive

Both Mottram and Miss Coles ultimately rose to the heights of the British game — Mottram is still ranked No. 1 and Miss Coles is a former No. 2 — but I shall be surprised and delighted if either Appleton or Miss Drury emulate them.

In London last week at Queens' Club, the All England Club at Wimbledon, and when it rained at the Vanderbilt Club, Shepherd's Bush, the 9th Veterans LTA Championships of Great Britain were being hotly disputed in three groups by about 160 of the keenest and fittest players aged between 45 and 70.

The over-55 singles was another long affair resulting in a 7-5, 6-7, 6-2 win after 115 minutes for Czech-born Merle Kuzlik over the eight-times Staffordshire champion Ken Jones.

Two more familiar figures of the veteran scene, R.A.F. "Bundi" Reynolds and Ted Robbins, disputed the final of the over-65 singles. Reynolds won as he usually does on these occasions, but the score 6-4, 4-6, 6-4 suggests that the

Robbins's practice sessions at Devonshire Park, Eastbourne, which I witnessed daily during the last Davis Cup tie versus Spain, are bearing fruit.

The ladies are somewhat coy about revealing their ages, so that there is only one age group over 40! That Rita Lauder should have won the singles was no surprise. For as Lancashire's Miss Bentley, she was ranked nationally in the 1960s and aspired even to Wightman Cup status on one occasion in 1966.

This year, the VLTA has enterprisefully launched a competition for the over-65s. Called the Britannia Cup, and played immediately following Wimbledon, it attracted 12 nations this year, and the British team of Reynolds, Robbins and Kenneth Drury finished as runners-up to the U.S.

Fortunately, the game in Britain is well supported at both ends of the age scale. The future veterans who will perhaps be enjoying the VLTA competitions in 30 years' time are well organised through the LTA with competitions and scholarships supported by the Saab motor company.

The £200,000 that Saab has injected into the under-16 age group over the next five years has enabled Paul Hutchins to achieve his goal of having regional indoor weekend tournaments throughout the winter

months.

FINANCIALTIMES

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David Fishlock reports on the new technology of swapping power between Britain and France

Perks and the tax base

PATIENT in kind rather than cash is a primitive and undesirable distortion of the market system, whether it arises in barter trading between nations or in the remuneration of employees. So the steps suggested on Friday by the Inland Revenue to tax the benefit provided to employers who use company cars in a more realistic way are surely welcome. Now that income tax has been cut to tolerable levels, particularly at the top of the scale, it should be possible for employers to offer incentives for hard work and ambition directly through higher pay. The proliferation of perks in recent years in Britain has been a symptom of an unhealthy addiction to high taxes and restrictive incomes policies.

Higher revenue

The Inland Revenue concentrates on the desirability of achieving equity between employees with and without the benefit of company cars. But an even more important consequence of the proposals will be to raise about £330m in extra tax.

The new taxes will come in approximately equal proportions from roughly trebling the imputed benefits of company cars, and from bringing around 1m cars which now escape tax altogether into the tax net. One of the most welcome features of the consultation document is that it suggests eventually abolishing the discrimination against "higher-paid employees" (those earning over £8,500), a category that has little more than political expediency to justify it. Under the present legislation only higher-paid employees are taxed on their fringe benefits. But the Inland Revenue estimates that two-thirds of all company cars are used by employees earning less than £8,500.

Special interests

Naturally there will be squeals of protest against these proposals, as there were in 1976, when the Inland Revenue proposed an almost identical reform. But this time there are grounds for hoping that change will not be水化, as it was in 1976, by what the Inland Revenue calls, with wry self-restraint, "representations from the motor industry." The present government is less inclined to subordinate its overall economic and social objectives to the interests of particular industries. It is also perhaps

Crossing-up

Far from complaining, company car users should be thankful that the Inland Revenue has not proposed an even harsher treatment of perks. First, only half the benefit of a company car would be taxed, when there is "substantial" business use, which covers the great majority of cases. Even when business use is "insubstantial," tax would be payable on only three-quarters of the full benefit. Second, and more fundamentally, the Inland Revenue has shown no inclination to tax benefits in the most strictly equitable way. This would involve adding to taxable income the gross amount that would yield the value of the perks after tax. Thus a 50 per cent marginal tax-payer who receives a benefit of £1,000 should, in strict equity, have £2,000 added to his taxable pay. Until the value of perks is groused up, there will still theoretically be a strong fiscal incentive to provide benefits in kind. But even the most determined tax avoiders would recognise, well before the fiscal advantages of perks are eliminated, the greater advantages of operating within the cash nexus.

Avoiding 'spillage'

But in practice there is much more to these international interties than merely emergency service. They began in central Europe as a way of exporting surplus hydro-electric power when the dams were full, thereby avoiding what the engineers call "spillage" water running to waste. Gradually, the interconnected electricity companies found that they could swap more and more electricity profitably and to their mutual benefit. They took advantage, for example, of differences in the times of peak demand, buying in daily to meet the peak rather than installing extra peak-lopping generating capacity.

Brazil joined the European electricity pool in 1961, when the CEGB and EDF laid a cross-Channel cable between Dungeness and Folkestone.

MEN AND MATTERS

Crying wolf in the woodshed

A seemingly insignificant take-over announced last week has stirred up the hornet's nest of Britain's highly traditional timber trade. Leo Groth, a director of Stora UK Group Holdings, managed to escape a good number of irate phone calls by taking a judiciously-timed holiday in the South of France. But he is now back at his desk and facing the not-very-harmonious music which has greeted the Swedish company's takeover of George Shipway, an old family timber company in Birkenhead.

"It's regarded as slightly treasonable to buy one of our customers' Groth admits. "They think if we are successful, we are going to swallow one then another, then another." But he insists that Stora—the second-largest private owners of forest land in Sweden, with 2.25m acres—has no intention of upsetting the applecart, either by going into the retail market, or locking out its other suppliers. "Then we would really have burned our bridges."

Given that Shipway is a relatively small company dealing largely in so-called "sludge" for pallets and packaging, these seem plausible enough denials. What worries Groth is that, despite his protestations of commercial innocence, the main importers in the UK—four of them, he says, have well over half the country's supplies sewn up—may terminate arrangements with Stora and put pressure on other suppliers to cut Shipway adrift. If that happens, Stora would be forced to distribute its own timber. "But it would be their fault, not ours." Understandably enough, Groth is anxious to play down this possibility.

Expansion

At first sight Mr. Delfim Nato appears miscast in the role of an expansionist battling on the side of liberalisation. The role he performed under previous presidents as one of the principal architects of the "economic miracle" did not endear him to workers' leaders. In his first pronouncements last week, however, he went out of his way to appear reasonable to organised labour.

For outside observers of the Brazilian scene and notably for those institutions who have lent money to Brazil the decision of Gen. Figueiredo to opt for expansion is one which deserves careful study and analysis.

Though heavily in debt already

Brazil has signalled that it does not intend to stop growing—or borrowing.

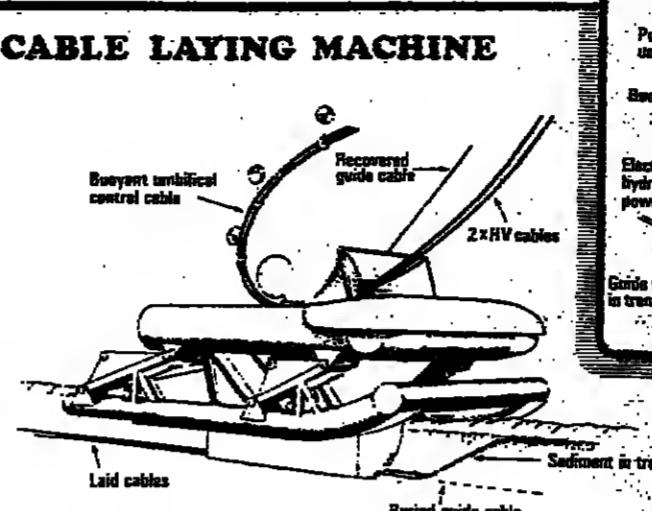
more conscious of the link between broadening the tax base and cutting marginal tax rates. Those who might be inclined to complain that a trebling of the tax they pay on their company cars would eliminate most of the benefits they received in the last budget, are overlooking the main justification of the Government's fiscal policies. This is aimed at incentives.

This is a most point whether the tax system which the present government inherited took much of the nation's income. What cannot be disputed is that extortive marginal taxes on income discourage people from trying to earn more. A profusion of tax allowances and an inadequate level of indirect taxes then saw to it that the Government's total revenue is not very much out of line with that in many other countries. The reduction in marginal tax rates and the broadening of the tax base can be seen as two sides of the same coin. By gradually dismantling tax concessions, as income taxes come down to acceptable levels, the Government will be able to maintain its revenue and increase incentives at the same time.

ford

They surveyed the seabed but found no convenient route through soft seabed such as can be exploited in the Skagerrak. So they must find a way of cutting through rock.

Both utilities have mounted development programmes. They chose a depth of five feet as adequate to protect against all but a supertanker's anchor. Geological survey has indicated a lot of hard rock with compressive strengths as high as 25,000 lb per square inch.



Submarine links to firms laying pipelines. All their experience—even of the North Sea—proved to be in soft seabed. No one, concluded Mr. John Yates, project manager, had yet solved the problem of embedding in rock.

So the CEGB chose two UK companies as its collaborators: Land and Marine Engineering, experienced in the North Sea, and Balfour Beatty, part of BICC, with wide experience of submarine cables. In January it placed contracts with these companies for the design and construction of two novel machines: a 11-ton trenching tractor, designed by Land and Marine, and an 80-ton cable-laying sled, designed by Balfour Beatty.

The principles of the trenching machine had already been tried on a scale model, cutting itself along the hawser while feeding a pair of high-voltage cables into the trench. It is equipped with high-pressure jets to blow out sediment ahead of the cables. Both machines are operated remotely from a control console aboard an accompanying vessel. Deliveries remain in attendance on the seabed.

The transmission division of

the next few weeks while the weather window remains open the system will be tested in difficult rock; chalk, sand, gault clay, hard sandstone—and the last and most difficult test-cables at 150 feet beneath the main shipping lane. Each time it will attempt to lay a few hundred feet of cable.

Modern technology of ac to dc conversion and vice versa involves large silicon semiconductor devices called transistors; thousands of them, assembled into "valves" and stacked up in large valve halls and kept cool by freely circulating air. For the past nine months GEC has had a trial running in north-west London of such a converter valve, to the evident satisfaction of the CEGB.

270 ft high building

But the size and above all the headroom required for these valves suggests a big building, perhaps up to 270 ft high. It also suggests the need for large fans to move large volumes of air to keep the valves cool. This in turn has persuaded those living in the vicinity of the proposed converter station at Selldinge, about 12 miles inland of Folkestone, that the CEGB's proposal mean a noisy intrusion into their rural environment. They have asked for and got a public inquiry, to begin in November.

The noise expected to come from the converter station is likely to feature importantly at the inquiry. The CEGB is inclined to play down any idea that it will prove intrusive to a community where the nearest inhabitant lives one-third of a mile away. The cooling fans will be buried in a false basement and the building itself will be sealed to keep out dust.

The submarine cable itself, says Dr. Howard, presents no particular technical problem, although the CEGB has specified one that will not be accused of leaking oil into the Channel. It is negotiating with two potential suppliers—both UK-based—BICC and Pirelli General. The submarine cable contract will embrace the cost of setting up a manufacturing facility for continuous stretches of cable of the length required; one which could readily find future markets both in Britain and abroad.

These are the machines now being tried out at a depth of about 45 feet in the chalky seabed of Sandown Bay. Dr. Howard is delighted with the progress of his collaborators in delivering them "precisely to programme in order to catch the weather window this summer." Provided the trials continue to go well, the plan is to move at the end of August to a point off Sangatte, the first of four test points along the proposed cable route. Over the

next few weeks while the weather window remains open the system will be tested in difficult rock; chalk, sand, gault clay, hard sandstone—and the last and most difficult test-cables at 150 feet beneath the main shipping lane. Each time it will attempt to lay a few hundred feet of cable.

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"It will be less than the rustling of leaves in the trees," claims Dr. Howard. He also points out that his division has lately been installing jet engines in urban areas to provide standby power from gas turbine stations, and has been able to insulate the surrounding houses from their noise.

For the CEGB the overriding advantage of the Selldinge site is that it is conveniently close to the 400-kV arm of the grid between Dungeness and Canterbury. Now Dr. Howard and his team will discuss the size of the building is still undecided.

Those opposed to the project at Selldinge have said it will be as big as Canterbury Cathedral. If it helps them accept it, he would be prepared to put in stained-glass windows, he says.

ESTIMATED UK COSTS OF 2,000 MW CROSS-CHANNEL CABLE (March 1979 prices)

	£m
Converter station at Selldinge	59
495 kV sub-station at Selldinge	33
DC submarine cable (32 miles)	73
Land and other cables	30
Civil work	10
Relays, controls, etc.	10
Modification to 400 kV transmission	17
TOTAL	182

* Electrical de France will have similar costs, plus the expense of strengthening its transmission system in north-east France.

"Whether the project goes ahead or not depends on whether we can embed. If not, it's go—no—but sides agree on that," says Dr. Peter Howard, director-general of the CEGB's transmission division at Guildford.

He is a team of men who unload ships."

This explanation fails to mollify Franz Josef Strauss, the Prime Minister of Bavaria, or the editorial writers of the Christian Democrat dailies. The outspoken Scherf had given an interview just before he mounted his hike, in which he said: "Imagine someone like Carl Carstens as Head of State. Then Richard Stucken, as president of the Bundestag; and finally, Franz Josef Strauss as Chancellor. It's like a bad dream. I would feel as if the country had been handed over to a gang."

Schaeff quickly weighed in, calling this an insult to Carstens, the President-elect, to Stucken, soon to take up his new post in the Bundestag, and not least to himself. With his ambitions to become Chancellor, Strauss is exploiting this chance to embarrass the Social Democrats.

In the past, Scherf's unconventionalities have been fairly harmless—such as refusing a chauffeur-driven official car and biking around Bremerhaven, or calling his fellow-politicians over-weight and complacent. But the impression is now growing that he placed himself in real danger of becoming West Germany's answer to Andy Young.

Frogs' friends

The Chinese, like the French and others, are partial to frogs' legs. Chinese chickens like them too, and certain communes mount large-scale frog and toad hunts in the irrigation canals and fields.

But with Coca-Cola has come conservation. The influential newspaper Guangming Daily last week sounded a warning about the ecological balance. The newspaper was commenting on a letter from a reader near Peking who complained that a great leap backward in the local frog population was encouraging mass infestations of insects, with the result that this year communes had been forced to

buy large quantities of expensive insecticide...

The reader reported that some farms were sending teams on journeys of up to 15 kilometres in search of the hapless frogs. Each man could catch 1,000 a day. Some species, including a slow-moving giant toad with a voracious appetite for the destructive armyworm moth, were in danger of extinction: "It is possible to work for half a day in the wheat fields without meeting a frog," he lamented.

Perhaps, like Scottish grouse, the frogs will have to be reared artificially if future hunters are not to return home empty-handed.

Abdul in the works

The wide boys of the Slater era are emerging, partly reconstructed, from the woodwork. In certain cases happy days are here again, in others not. Into this last category falls a veteran asset-striper, now settling down to running an engineering company. He was explaining to me last week why his group had to write off nearly £500,000 last year. The explanation lacked it seemed to me, something in the lucidity department. Eventually his eyes met mine. "Look here," he said, with a hint of early Seventies abrasiveness. "If we're entirely off the record, we got taken to the cleaners by a Saudi called Abdul."

Gang warfare

Hennig Scherf, senator for finance in the Bremen state assembly, and a rising star among West Germany's Social Democrat politicians, set off recently on a cycling holiday.

But whenever he stops pedalling there is a reporter waiting to ask him how he defines the word "gang." The tall, 40-year-old Scherf affects surprise. "A gang," he says, "is something honourable up in the coast. It

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FINANCIAL TIMES SURVEY

Monday August 20 1979

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CHINA

China is changing rapidly and becoming increasingly open to the outside world at the same time as it is seeking recognition as a world power. In the first major survey of China to be published by the Financial Times, David Housego, Colina MacDougall and Geoffrey Owen report on their recent visit to China and describe the country's social, economic and political progress.

Welcome partner in the world

By David Housego

CHAIRMAN HUA GUOFENG is to tour Western Europe in the autumn. It says much for China's historic disdain of the outside world that it has taken until the final quarter of the 20th century and almost 200 years after West Europe's pioneering of the industrial revolution and of the socialist ideology on which China's communist regime is based for a Chinese head of state to visit this quarter of the globe.

But like Vice-Premier Deng Xiaoping's visit to the United States in February, Chairman Hua's visit is a remarkable reflection of the change that has come over China in the last two years as it has nudged its way into the international community and sought to become part of the world's financial and trading system.

To gain an entrance ticket it has sacrificed many of its former taboos. It has borrowed abroad, raised syndicated loans on the commercial markets, encouraged investment in joint ventures in

China and allowed foreigners to roam across the country in a way that was rarely permitted to the western "compradors" of the 19th century—confined for the most part to their concession areas in the seaports like Shanghai.

At the recent meeting of the National People's Congress it also revealed for the first time in 20 years a wealth of economic data, suggesting that China may indeed soon apply for membership of other global clubs like the IMF or the World Bank.

Overdue

China has also been seeking recognition for itself as a world power—and Chairman Hua's much publicised tour is certainly part of this objective. China wants to cut a higher profile in what it sees as the central issue of international diplomacy today—containing the power of the Soviet Union. To that end it has normalised relations with the U.S., signed a Treaty of Friendship with Japan, and reached a long-term—though vaguely worded—commercial agreement with the EEC. It is

also anxious to reassert its influence in South East Asia, risking this year a war with Vietnam to bring to heel an historic rival and to challenge the growth of Soviet power in the region.

Along with this more open international stance there has been a relaxation of control within China itself. Vice-Premier Deng seems eager to encourage intellectual debate as one way of stimulating enquiry and thus enabling China to absorb new scientific and technological developments essential to its

CONTINUED ON NEXT PAGE

modernisation. It is true that there was a crackdown in the spring when the posters on "Democracy Wall" in Peking and the demonstrations in Shanghai challenged some of the basic assumptions of the communist regime. But China is probably a less repressive society than it was during Mao's lifetime, and it now has at least the framework of a criminal and civil code.

In its bid to achieve more rapid industrialisation, it is looking to the west for technology. It is also trying to introduce into its own cumbersome bureaucracy, which has not begun to come to grips with the problems of how to rule a billion people, reforms that to us seem long overdue—a devolution of responsibility to provincial governments and to industrial enterprises the use of the market mechanism to achieve a more efficient allocation of resources, bank supervision over credits to industry and, perhaps most important of all, the promise of higher standards of living as a way to get people to work.

All this makes China a more welcome partner in the world. It has other attractions too—the possibility of large offshore oil deposits, rich mineral resources and a substantial market (not as great as some had hoped last year but still important) for capital goods. But how long can the present power structure and the policies associated with it survive?

China's record since independence bodes ill for continuing stability in the future. There is probably no other sizeable nation in the world that has seen

Three factors will determine whether the present leadership and its policies can succeed.

The leadership seems to have struck a modus vivendi in the wake of the Gang of Four struggles and is trying to carry through major reforms. But the educational system is still recovering from the excesses of the Cultural Revolution and living standards are rising slowly.

In foreign policy distrust of the Soviet Union is the dominant theme. The Great Leap Forward of the 1950s was followed by the Great Depression. That in turn was followed by the Cultural Revolution, which began in 1966 and did not finally spend its force until after Mao's death in 1976. The trauma of those years—in which schools and universities were closed for much of the time so that a whole generation has grown up with scarcely any education at all—is only now beginning to be fully appreciated in the west.

Even since Mao's death, policy has moved by fits and starts. The economic plan that Hua trumpeted in 1977 for transforming China into a major industrial power was abandoned less than a year later. China's leaders now say, is going through a three year period of "readjustment." Western observers are right to remain sceptical as to whether this is the final turn of the wheel.

Three factors will determine whether the present leadership and its policies can succeed. The most immediate is that the leadership itself hangs together. Hua and Deng have been rivals in the past—Hua accused Deng of holding "wrong tendencies" in 1976 after Hua had helped boot Deng out of power—and will probably continue to be.

But they seem to have struck a modus vivendi in which it is the moderates associated with Deng who have the upper hand.

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Political and social framework

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Still divided on power and policy

THE NEW LEADERSHIP

DESPITE THE harmony in China portrayed to the outside world and the announcement at the recent National People's Congress of bold new plans inspired by Vice-Premier Deng Xiaoping—only No. 3 in the hierarchy but clearly still the force behind the throne—the leadership and the country are still divided on questions of power and policy.

Though the balance of power is certainly with the pragmatic Deng and his supporters, whose incentive policies appeal widely to the average Chinese, there is growing evidence that a substantial body of opinion still clings to the radical ideas and attitudes prevalent in the time of Chairman Mao. These are represented on the politbureau by the "Whateverists," as the Chinese Press now calls them, those who say "Whatever Mao said was right."

This division has come about partly for personal reasons, because personal loyalties are important in the Chinese system, and partly for political reasons, since those who came to power as a result of the Cultural Revolution and its attendant arbitrary arrests and killings are afraid to lose it (the semi-official figure for deaths during that period is now 400,000). It even springs from ideology, since the years of Mao impregnated almost every official in almost every institution with the idea that success and profit, which the present leadership is desperate to pursue in order to galvanise the economy, were somehow wrong.

Despite this, the prevailing voice of Peking constantly proclaims unity and stability, remarking that the vast majority of people who oppose its current policies do so because they are mistaken and not because they are adamantly hostile,

publicly the leadership says that all will be forgiven to those who repent and adopt the new line, and that the days of dismissal and humiliation are over. Such is the implied explanation for the fact that there are still half a dozen or so well known hangovers from the Cultural Revolution officially on the politbureau.

Underneath this superficial calm, turbulent crosscurrents are flowing. Last December the ascendancy of the pragmatists seemed a foregone conclusion, when the Third Plenum of the Central Committee of the 11th Congress of the party met and confirmed the personal standing of Deng, both vis à vis Chairman Hua Guofeng, the nominal leader of the country, and the so-called "Whateverists."

The plenum decided to emphasise collective leadership and drop unnecessary bonifices, so that thereafter Hua's position was downgraded. It also rehabilitated some former distinguished leaders, one of whom, Peng Dehuai (now dead) was sacked by Mao in 1959 for attacking the 1958 Great Leap Forward. Peng's criticisms of the Lean were based on his investigations in Hunan province, where Hua at the time was deputy governor. That rehabilitation can hardly have been welcome.

Although the "Whateverists" retained their politbureau ranking at the plenum, they were diluted by some important new appointments, of which the key one was that of Chen Yun, China's leading planner of the 1950s. They lost their executive functions, and their apparent powerlessness was underlined by the new policies announced them of impending economic and legal reforms, which were clearly those of Deng.

But in March and April the pendulum moved the other way. The "Whateverists" on the politbureau, out of sight since December, began to reappear in public, a sure sign that their status was on the upswing. Deng had become vulnerable because two, and perhaps three,

of his policies had run into trouble and lost him support. The first was the new liberalism which had allowed the outbreak of posters in December. These escalated rapidly from permitted attacks on the Gang of Four to the questioning of Chinese policy in general and, in the New Year, to unruly manifestations of discontent.

But few of the people who swarmed round Democracy Wall in Peking were genuine political innovators. While the posters revealed a strong demand to right the personal wrongs done during the Cultural Revolution, to improve living standards and social conditions and to open up contracts with the outside world, it was the rare one that suggested alternative policies.

Later, the emphasis of the demands moved still more towards amending social wrongs, particularly at the Spring Festival (Chinese New Year), when huge numbers of young people who had earlier been sent down to the countryside returned to the cities and refused to go back.

Inability

This outburst of feeling, plus the continuing inability of the local authorities to find jobs for the school leavers of 1977 and 1978, brought home to the central leadership the magnitude of the unemployment problem on their bands. In fact this appeared to be a much more serious threat than political dissidence, for the intellectuals, particularly the younger ones, were much more concerned about getting a job and making a niche for themselves and their families within the existing system than in setting out to change it. All the same, more traditional and less sophisticated leaders than Deng were panicked into demanding suppression, clearly believing that these liberalising trends were a mistake.

Deng was also in trouble at the time for the over-extension of the economy caused by the uncontrolled construction last year in the modernisation fever. Bottlenecks and shortages had become glaringly apparent, and the new freedoms for enterprises to negotiate independently for foreign equipment meant the alarming approach of a shortage of foreign exchange. A further possible embarrassment was the February invasion of Vietnam, which Deng had clearly favoured. It was by no means an unqualified success, causing large losses and some economic disruption, whatever its benefits in terms of foreign policy.

Evidently, then, in April Deng and his supporters were vulnerable. The top-level party working meeting that took place that month to reorder priorities probably saw fiercer criticism and no doubt some hard bargaining. But by June Deng had apparently quelled the opposition. The National People's Congress that month numbered among its achievements a new economic plan based largely on material incentives, a new body of law to confirm some rights to the individual, and the appointment of three new vice-premiers, all solid economists of 1950s vintage. There is no doubt that these were Deng's objectives and that he now has a strengthened body of support at the top.

Nevertheless there is still substantial opposition to his ideas. The "Whateverists" remain in the leadership, in spite of renewed poster attacks in July on the most prominent Wang Dongxing, once Mao's bodyguard and leader of the elite army unit S341. In addition Chairman Hua's position is ambiguous. He was once himself a "Whateverist" though before the term was coined. He holds both the top two posts in China, and however far he seems to have travelled to Deng's side since his accession to power in 1976, he still rose to his present position as a result of the

sufferings of Deng and his friends. The continuing promotion of rehabilitated leaders—particularly Peng Zhen, who disappeared in 1966 and was once far closer to Mao than Hua has ever been—is a constant threat to his pre-eminence.

None of this might matter if the moderates in the leadership could be certain of carrying the country easily along with them in their new policies. But they cannot. Since the Congress, the Chinese Press has regularly blasted the "villains" and "arch-criminals" who oppose the policies of Deng. Some important provincial leaders have not abandoned traditional Maoism nor adopted the more rewards-for-more-work ideas which are the foundation of Peking's present plans.

There are some, the People's Daily said emphatically in July, who actively pushed the Gang of Four's ultra-leftist line and still have not changed their stand, who are accustomed to trimming their sails and manoeuvring among different groupings. In the rural areas there are "ultra-leftists" who might make a comeback since they "caused chaos" in March and April, describing the policies of Deng as "deviationist." And there is a vast mass of uneducated, inflexible officials whose main experience was in the Gang's period, accept it as normal and refuse to change.

Taken together, these constitute a formidable hurdle for the leadership to overcome. Deng has a strong team in Peking, but his policies are a gamble and could still be frustrated by hostility at the top and the opposition, fear and inertia of an influential minority distributed throughout China.

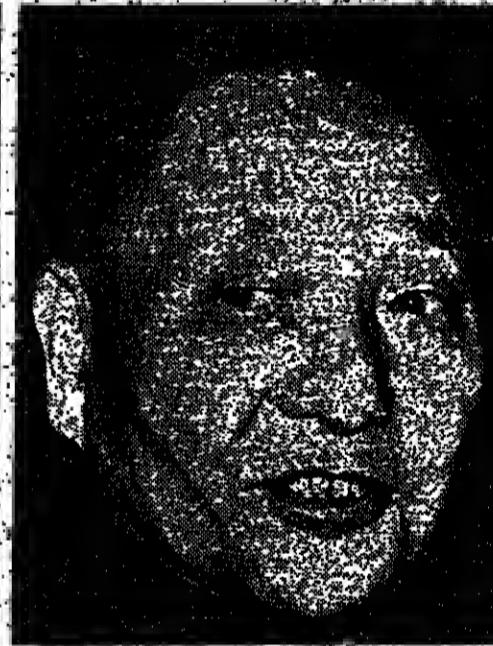
C.M.

COMPARATIVE BASIC STATISTICS

	CHINA	INDIA	U.S.
Area (m sq km)	9.6	3.3	9.4
Population (m)	975	626	317
GNP (\$bn)	330 (est.)	103	1,762
Exports (\$bn)	10.7	7.0	141.7
Imports (\$bn)	12.0	8.3	172.9
Grain production (m tons)	305	126	267
Steel production (m tons)	32	10	124
Crude oil production (m tons)	104	11	432
Coal production (m tons)	618	102	660



Chairman Hua Guofeng



Vice Premier Deng Xiaoping

Welcome partner

CONTINUED FROM PREVIOUS PAGE



"Water isn't getting to those upstairs." A Shanghai daily newspaper's view of the disproportionate share taken by the USSR from Comecon membership.

machines and 13 watches. On this admittedly crude basis, China fits into the category of middle level developing countries attempting, now, like other developing countries to raise its national income by expanding its agricultural output; by upgrading its industry, and by trying to pay for this by exporting more manufactured goods against the tide of a world recession. Developing countries have a way of muddling through.

But China is of course more than a developing country. It has 1 billion people and is adding to its population at the rate of 10m-20m a year, which at a time of pressure on land and food throughout the world inevitably makes it a force in world politics.

The exodus of refugees from China through Hong Kong this year, the war with Vietnam, the resistance of South East Asian states to a new wave of Chinese immigrants carried to the point of pushing them back to drown at sea can all be seen as part of an immense communal and population problem that will grow more troublesome as the years go by.

China is also seen by the Russians as a major security threat, a perception which in itself draws China into the West's calculation of the global strategic balance. In its efforts to find a counterbalance to the Russians, China is also being drawn deeper into a Pacific community of Japan, the U.S. and—as yet to an unknown extent—the newly industrialised countries of South Korea, Taiwan and Hong Kong.

In the last resort the West stands to gain substantially by the changes being made in China and by China's more open stance to the world. If Deng and his policies should fall, there is every chance that the pendulum would swing sadly back to "mother" isolationist, xenophobic and repressive regime.

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دكتامن الأصل

Worldwide drive for new friends

FOREIGN POLICY

THE ECONOMIC policy of the new Chinese leadership is a legacy of the early 1950s. But in foreign policy it has struck out on a course that is entirely its own.

At no time in the past 30 years has China so abandoned the precepts of self-sufficiency or of aloofness from the non-Communist world as it does today—for a diplomacy by which it seeks to acquire the status and responsibilities of a major power. The normalisation of relations with the U.S., the Treaty of Friendship with Japan and the extensive tours its leaders have made through South-East Asia, Europe, Africa and the Middle East point to Peking's desire to strike up new alliances across the world. Moreover, for the first time in 17 years China has gone to war, launching in February what it described as a limited counter-attack on Vietnam.

Linking these diverse strands is the central belief of Chinese foreign policy—that the Soviet Union is an expansionist power determined to strangle China by encircling it and that it must be challenged at every stage in its advance. In the warnings of Vice-Premier Deng Xiaoping in Washington, in Peking's denunciations of detente and the SALT agreement as valueless, in the invasion of Vietnam itself, lie the same message of the need to resist Soviet ambitions.

Alliances

Thus China's response to the threat of Soviet encirclement has been to stake out its own network of alliances designed to outflank the Russians. Its invasion of Vietnam shortly after that country had signed a treaty of friendship with Russia was an attempt to demonstrate that such a treaty offers little 'guarantees' of national security. The result of the action has been to make Indo-China the new focal point of Sino-Soviet rivalry.

The opening of Sino-Soviet talks with a view to resolving outstanding differences does not lessen the deeper suspicion of

the Russians that led China in April to abrogate its own 30-year Treaty of Friendship with the Soviet Union. But so long as the U.S. and other Western powers leave the door open to Moscow Peking feels it wise to do as well.

The philosophy behind this policy was spelt out in Deng's speech to the UN in 1974—after China became a member of the UN and before Deng was ousted from power for a second time by radicals—which portrayed the world as divided into three groups. Deng picked out the Soviet Union as the most dangerous of the super powers, ready to precipitate a war with the U.S. and against which the second group of powers such as Japan, the EEC or China should be prepared to take a combined stand.

Peking has thus been pursuing new alliances to offset Russian power. In August it signed the Treaty of Peace and Friendship with Japan—thus officially at least ending any lingering resentment at Japan's invasion of China before World War II, but more important signalled China's success in getting Japan to give preference to China over the Soviet Union in its relations with the two major Communists.

The Japanese would have preferred parity of relationship in their ties with China and the Soviet Union because of the potential of the two countries' natural resources. But they ultimately went ahead with the treaty in spite of Russian opposition because of the Russians' unwillingness to show any accommodation in the dispute over the return to Japan of the Kurile Islands that the Russians occupied in the war.

In January, China and the U.S. unexpectedly announced that they had agreed to normalise relations. The roots for this move were laid during President Nixon's visit to China in 1972 but the discussions at the time left a number of questions about the future of Taiwan unsettled. During his visit to the U.S. Deng agreed to respect "the realities of Taiwan without formally ruling out the use of force to annex the island. The U.S. abrogated its defence treaty with Taiwan but will continue to sell it arms. Though 'normalisation' has been followed by cultural and trade agreements, the U.S. has resisted the initial Chinese

attempt to present their close ties as the strengthening of the anti-Soviet bloc—or what in American terms has been known as "playing the China card."

But the Chinese have pursued their anti-Soviet drive through other channels. In August Chairman Hua Guofeng made his first tour abroad as Head of State to visit Yugoslavia, Romania and Iran—all countries on Russia's southern flank and suspicious of the growth of Soviet power. The Chinese have condemned the U.S. failure to stand up to the Russians in the Gulf region and have supported ideas of a Gulf security pact. They have championed Pakistan—possibly to the point of helping it to establish a nuclear capability. Their senior leaders have toured Africa and the EEC—with the EEC a long-term though vague trade agreement having been signed—and Hua is to visit West Europe in the autumn.

Parallel

Along with the goal of building up a network of relationships with the major industrialised powers has run the parallel aim of strengthening China itself through a modernisation programme drawing on foreign technology. This leadership can claim to be enhancing rather than diminishing the familiar goal of self-sufficiency by a more active foreign policy.

Trade pacts—and more important, an increase in the volume of trade and the readiness of the Chinese to expand imports of capital plant through borrowing abroad—have followed the new diplomatic initiatives. That the Chinese in their first flush of enthusiasm for Western technology hit off more than they could chew does not alter the fundamental shift in attitude towards the importance of foreign trade in stimulating the economy.

Chinese policy in South-East Asia at first seemed of a piece with its building up of a network of friends and of attempting to deny advantages to the Soviet Union. But Peking was clearly caught off balance by the momentum of events that at first carried it into growing rivalry with Vietnam, then into a potential confrontation with the Soviet Union which signed a Treaty of Friendship with Vietnam, and then into a

risky war with Vietnam. The end of this saga is by no means in sight. Vice-Premier Li Xianlan has left open the possibility that China will repeat its punitive action against Vietnam—an enormously costly measure that the economy cannot afford but in which China feels its prestige and security are at stake. The repercussions of China's conflict with Vietnam and the accelerated flow of ethnic Chinese refugees from Indo-China in the first half of this year have also revived anti-Chinese communal feeling in South-East Asia—damaging to both the expatriate Chinese community and to Peking.

The Chinese carry much of the blame for the escalating rivalry in Indo-China. Their support for Pol Pot's regime in Cambodia was at one level backing for Khmer nationalism against the extension of Vietnam's influence in Indo-China and was welcomed as such by other South-East Asian States anxious for an independent Cambodia as a buffer to an expansionist Vietnam. But it was also backing for an inhumane regime that had alienated world opinion and which in 1978/77 was carrying out provocative raids across Vietnam's frontiers.

Cuba clumsily hoped to bring pressure on Vietnam by cutting off aid. Instead it pressed Vietnam further into the arms of Comecon and the Soviet Union. The protective stance it adopted in 1978 towards the Overseas Chinese communities of South-East Asia both gave Vietnam an excuse for rounding off its ethnic Chinese community as a fifth column and aroused anti-Chinese fears among other States such as Malaysia and Indonesia with large Chinese communities.

Cuba's actions increased Vietnam's irritation with Cambodia. But this was against a background of historic rivalry between the two States. In deciding to take over Cambodia through a lightning invasion in December, the Vietnamese could hardly have expected that China would suffer this blow to their prestige without response. Indeed by enlisting Soviet support through the Treaty of Friendship the Vietnamese added to the provocation. But it is still a moot point whether China's counter-attack in February served its avowed purpose of teaching the Vietnamese a

risky lesson. The Chinese suffered far heavier casualties than they had expected and the fighting showed up the inadequacy of their equipment. They failed to get the Vietnamese to withdraw mainland divisions from Cambodia which would have weakened Vietnam's position in Cambodia. Though they demonstrated that the Russians were unwilling to rush to the aid of an ally, the war prompted a massive Russian-supported reinforcement of Vietnam's northern border.

The Vietnamese have since allowed Russian ships to dock at Cam Ranh Bay, the former American base and strategically important for the Russian fleet, whose nearest home port is Vladivostock. The Russians have greatly expanded their

consular staff in Ho Chi Minh City (Saigon) to about 100. The invasion also did not deter the Vietnamese from carrying out another offensive in Cambodia or from expelling more ethnic Chinese.

As against this the Chinese carried out a virtual scorched earth policy in the parts of Vietnam they did occupy, causing severe damage to the already battered Vietnamese economy. They flattened four towns and destroyed an important phosphate mine and a tin mine. They have forced the Vietnamese to maintain their economy on a war footing and are still in a strong position to keep up pressure on Vietnam through aiding insurrections in Cambodia and Laos. They also—in the ambivalent way that South-East Asian states regard

Vietnam and China as both potentially hostile but to be played off against each other—won some merit in South-East Asia for standing up to Vietnam.

The ambitious nature of their foreign policy has inevitably raised questions as to whether the Chinese are overstretched in this area as they are in so many others. China has a large foreign service—Chou En-lai protected it from the worst ravages of the Cultural Revolution—but because of China's former emphasis on self-sufficiency it lacks experience. China and Vietnam over ownership of the Spratly and Paracel Islands in which Russian fleet movements in the South China Sea now lend visible weight to their support of the Vietnamese case, and the continuing confrontation between China and Vietnam over Indo-China. The Chinese will have to learn that acceptance into the international community implies proceeding with caution.

D.H.

Reduced priority in national scheme

THE MILITARY

THE DEBATE over the role of the military in China has been resolved, at least temporarily, in favour of a low profile and priority to economic development as a whole instead of to defence.

Soon after the 1976 fall of the Gang of Four pressures for rapid modernisation of the army were apparent in articles in the military Press, but these seem to have been firmly put down. In the list of the "four modernisations," China's programme for updating the economy, in contrast to 1977 when it sometimes occupied third place, defence now consistently figures after agriculture, industry and science and technology.

This may seem to contradict

the implications of the spring 1979 invasion of Vietnam, when

the Chinese took on a conflict with the most experienced forces in Asia. But there are various explanations for this.

One is that when the Chinese see their foreign policy interests threatened they will not stop short of military action even if the apparent odds are against them.

Another is that the Chinese generals forced the conflict simply to show conclusively that their weaponry was out of date. And yet a third reason is that the Chinese have been so cut off that they did not realise how hampered they would be when up against the sophisticated electronic and optical weapons of the 1970s.

It remains to be seen how valid are the threats to teach Vietnam another lesson in the future. In the meantime no particular kudos has gone to the military in the February incursion. It had no effect, or perhaps even a negative one, on enhancing their status as a

pressure group in China. Since the end of the Cultural Revolution, when the army was brought in to restore order in the vacuum caused by the destruction of other authority, the party has been gradually replacing the army in the national power structure—to the point where, on the all-powerful Politbureau, civilians outnumber the active military by two-to-one (three new civilians were added as recently as last December).

In the provincial hierarchy, only a handful of military men now hold the vital provincial party first secretary post. There is a growing tendency to bring the army's party committees more and more within the civilian party's ambit by appointing civilian officials to the party commissar's job in the local military.

They are also reported by the Japanese press to have a CSS-4, with a range of 650 km, 50-60 MREMs (their CSS-1, with a range of 950 km), 50-60 ICBMs (CSS-2, with a range of 2,400 km) an extended-range missile, the CSS-3 (with a range of 6,500 km), not an ICBM but powerful enough to launch a satellite.

They are also reported by the Japanese press to have a CSS-4, with a range of 11,000 km (which puts it in the ICBM class), but they are not known to have tested it.

So far they are thought to have deployed the CSS-1 and CSS-3 along the Sino-Soviet

CONTINUED ON NEXT PAGE

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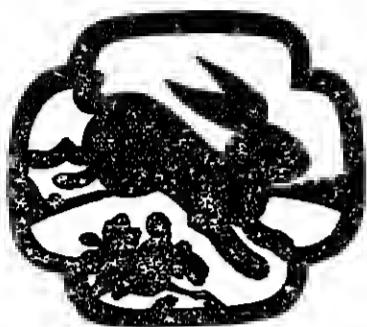
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POLITICAL AND SOCIAL FRAMEWORK

Modest improvement at best

LIVING STANDARDS

CHINA'S URBAN and rural workers are getting their highest wage increases in 20 years. The average wage of workers in State-owned enterprises rose 7 per cent last year, according to statistics released during the recent National Party Congress meeting, and further increases are in the pipeline.

Because of Mao's "rational low wage policy" there has been only one other increase in industrial wages since 1963 and that was for those at the bottom of the scale.

The income of commune members (excluding any additional earnings they might get from marketing the produce of their own backyard plots) was said to have risen by 13.7 per cent. The rise should be much bigger this year as a result of the 20 per cent increase in the State procurement price for grain and higher increases for other agricultural products.

But how much are living standards improving? The emphasis that the leadership is putting on promises of more pie to extract more work is one sign that up to now most Chinese have seen scant personal benefit from so many years of turmoil and hard toil.

Standards of living are one of the hardest things to measure in any country. The Chinese in the past have discouraged prying Western eyes. This article draws on work published by Dr. Christopher Howe (one of the few Western scholars to have done research on living standards in China), recent figures published by the Chinese and our own inquiries (impressionsistic like those of any visitor to China and limited by what the Chinese permit a visitor to see).

Average

At the NPC meeting, Vice-premier Yu Quill said that the average wage of an industrial worker in a State enterprise (the elite of the urban workforce) was 644 Yuan (\$399). This is 54 Yuan a month. The last time the Chinese announced an official figure for the average wage was in 1976, when they said it was 60 Yuan a month.

The new figure confirms what has long been suspected in the West that in the past, the Chinese have been exaggerating the average level of industrial wages.

Dr. Howe has calculated that, in real terms, the average industrial wage actually fell between 1957 and 1974. This decline was due to a combination of the freeze on wages and of slowly rising prices for some consumer goods, meat, vegetables and canteen meals.

Almost certainly this decline continued until the first increase in wages in 1977 which resulted in a 10 per cent rise for the lowest 40 per cent of workers.

Among factories we visited we were given the following average wages: Shoudu Steelworks, 63 Yuan; Anshan Iron and Steel Company, 64 Yuan; Shenyang No. 1 Machine Tool Plant, 60 Yuan; Steam Turbine Plant, Shanghai, 60 Yuan; and the Chengdu Measurement Instruments factory, 55 Yuan.

At the Shenyang Machine Tool

Plant the wages being paid to each of the eight grades of workers were the same as those reported by other visitors in 1972 and 1973, reflecting an unchanged national pay scale. The present wage rise is being implemented by pushing workers up a grade, so pushing up the average wage. In the past 20 years one reason that the average wage has been declining even in nominal terms is that those who retired from the upper grades were never replaced.

A family having to survive on the earnings of only one wage winner is living in China at little more than subsistence level. A 64-year-old attendant working behind the counter of a department store in Chengdu earned 57 Yuan a month. He had a wife in hospital and two daughters to support.

After buying food (in Chengdu this would have been mainly rationed grain and some vegetables), he had little left over for new clothing. He paid 1.96 Yuan a month in rent. He said he just managed to get by and his nice luxury was a radio.

But of 10 people we picked at random in question at department stores in Chengdu and Anshan, he was the only one to be the sole wage earner in his family. An elderly workman with a job in a mining machinery repair shop in Anshan had two daughters as well but a family income of 120 yuan. He claimed to be saving 30 yuan a month and was hoping to buy a television.

A young recently married workman with a job in a packaging factory claimed a household income of 100 yuan and said he had 200 yuan in the bank. A warden in a great white panda park in the Himalayan foothills who was visiting Chengdu said he earned only 13.50 yuan a month. But in his family of six, his wife earned 20 yuan and a daughter 37 yuan. He claimed to have 200 yuan in the bank.

The striking fact about most of those we spoke to was their relatively high level of savings—either the result of responding to the State's call to save more" or because there have not been the consumer goods in the shops on which to spend their money.

Thus though average individual urban incomes have only recently started to rise, family incomes seem to have been growing more because more people have been working. A senior official in Shenyang told us that whereas in 1965 there were an average 1.58 people working in a family, there were now 2.34. Also, the number of dependants that each employee has to support has dropped.

A further factor making for higher incomes in some cases has been the reinstatement of bonus payments. In the Shenyang Machine Tool Plant there is an average annual bonus of 20 yuan and a monthly bonus of 5-15 yuan.

Rural incomes are far lower than urban incomes and vary more from province to province. Wage policy over the last 20 years—and one being continued by the present leadership—is to try to diminish the gap in order to get the peasants to produce more food.

In reported to the Congress that last year the per capita income of rural commune members was 74 Yuan. But this gives little guide to the wide

area.

In 1968 came the Cultural Revolution and ten years of upheaval. Education officials were imprisoned and teachers denounced as "stinking intellectuals". She herself was arrested as a "close follower of the revisionists" made to do manual labour and then sent to work on a farm. Afterwards there followed a period in which she was put in a concentration camp as a counter-revolutionary, confined to a cell and allowed no exercise apart from walking in fits three times a day to collect her meals.

In 1971 she was released.

But the turmoil in Sichuan did

differences in living standards. The bulk of the 100m people (a tenth of the population) whom Li Xianian has referred to as undernourished would live, for instance, in the countryside. But at the Wuhan commune outside Shenyang we were told that income per head was 190 Yuan, of which the equivalent of 70 Yuan was taken in the form of a rice ration of 310 Kg. At a commune near Chegong the average income was said to be 135 Yuan plus a 310 Kg allocation of rice. Both

are prosperous communes.

Apart from the increase in State procurement prices, peasants now have more opportunity to increase their incomes by selling farm produce grown on their own vegetable patches and doing spare time work such as silk weaving. The "free markets" that have sprung up in Shanghai, Shenyang and other cities over the last year are a sign of the increasing numbers of peasants who are bringing vegetables to sell privately in local urban areas.

In an effort to measure how far living standards have improved in China, Dr. Howe has constructed a personal

consumption index weighted for items in the household budget (food, clothing, fuel, consumer goods, housing) and some public items such as health and education that are wholly or partly subsidised. On the basis of this there has been a modest rise in personal consumption of about 1.7 per cent a year from 1952-74.

Rising

Growth consumption per head has barely risen—indeed the level of grain imports has been rising significantly to meet the additional demand of population growth—and is only about 25 per cent above that of Bangla Desh.

Housing certainly has not kept pace with population growth. In and around Chengdu there are slums comparable to many cities in South East Asia.

The growth in living standards, Dr. Howe argues, has come from the improvement in welfare services and increased consumption of secondary foodstuffs such as meat, oil, fish and increased purchases of manufactured consumer goods.

There is plenty of evidence

that the Chinese are anxious to buy more consumer goods—but if only they can get them. The manager of the No. 1 Department Store in the Nanking Road in Shanghai, one of the larger stores in probably China's most fashion-conscious town (where girls pay 2.50 Yuan for a hair perm and enviously eye the smart shoe being packed for export), points to a dramatic rise in turnover in the last three years.

Sales increased from 138m Yuan in 1977 to 163m Yuan in 1978 and a projected 200m Yuan for the year. He says he would sell far more goods if supplies were unlimited.

But he is allocated only 300 television sets a month (retail prices range from 2,900 Yuan for a 20-inch imported colour set to 500 Yuan for a 12-inch Chinese-made black-and-white one).

For televisions, bicycles, sewing machines and gym shoes a complicated rationing system is in force. Potential purchasers have to have a certificate of authority from their workplace which in turn has a monthly quota for its staff of these sought-after items. The better

brands of shirts, watches and radios are snapped up quickly after being put on the shelf.

The manager denies that these shortages lead to a black market. Almost certainly they do, and almost certainly as well, this pent-up consumer demand which has been suppressed for so long, partly through fear that conspicuous consumption risked political damnation, will generate increasing inflation.

Unless prices can be held in check the Chinese will find both their wage increases and their savings nibbled away by inflation.

Largely in the hope of preventing this—and the political blackmail that would accompany it—the leadership is encouraging the expansion of light industry. Indeed, a judge from a recent commentary in the Chinese Press, after the slow industrial growth of the first half of 1978, the government is looking to a "consumer-led recovery to bring the industrial growth rate for the year up to the planned 8 per cent". The puritan Mao would never have approved of that.

D.H.

A generation lost

EDUCATION

LISTEN TO the tale of Mrs. Duanyu. She is Director of Education in the province of Sichuan—a post which, since the province has a population of 98m, would entitle her to Ministerial rank in almost any other part of the world.

She was a member of the Communist underground movement in Hubei province in the 1930s. She then joined the 8th Route Army and went to Yan'an, which Mao had made his headquarters in 1937. She won distinction there for running a school whose success was praised by the propaganda department of the Central Committee of the Communist Party.

After the war she helped build up the education system of Sichuan. This was the glorious period as she remembers it—not so glorious we would think, as most of the books then in use in schools were Chinese translations of Stalinist texts—when you could see the merits of the socialist system. Like many Chinese of the older generation, she retains a wide knowledge of culture and history.

In 1968 came the Cultural Revolution and ten years of upheaval. Education officials were imprisoned and teachers denounced as "stinking intellectuals". She herself was arrested as a "close follower of the revisionists" made to do manual labour and then sent to work on a farm. Afterwards there followed a period in which she was put in a concentration camp as a counter-revolutionary, confined to a cell and allowed no exercise apart from walking in fits three times a day to collect her meals.

In 1971 she was released. But the turmoil in Sichuan did

not end then. Many feel the worst years in the province were 1974, when the Gang of Four was trying to gain ascendancy, and 1976, during the power struggles at the time of Chairman Mao's death. For teachers—one of the worst periods was in 1974 after Madame Mao had urged primary school students to revolt against their teachers following a complaint by a Peking high school student that she had been harshly-treated by a teacher.

As Mrs. Tao tells it many school buildings were damaged and some burnt in the faction fighting. Equipment and books were destroyed. From about 1967 until 1971 all schools taking children above middle grade (from 13 to 17 years, though most children leave at 15) were closed. In the middle grade the emphasis was on practical work. "Physics was three machines and a pump, tractors, diesel engines and an electrical machine. The teaching was modelled around these."

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As Mrs. Tao tells it many school buildings were damaged and some burnt in the faction fighting. Equipment and books were destroyed. From about 1967 until 1971 all schools taking children above middle grade (from 13 to 17 years, though most children leave at 15) were closed. In the middle grade the emphasis was on practical work. "Physics was three machines and a pump, tractors, diesel engines and an electrical machine. The teaching was modelled around these."

After the war she helped build up the education system of Sichuan. This was the glorious period as she remembers it—not so glorious we would think, as most of the books then in use in schools were Chinese translations of Stalinist texts—when you could see the merits of the socialist system. Like many Chinese of the older generation, she retains a wide knowledge of culture and history.

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Strategy for the next three years

ALMOST 30 years have passed since the founding of the People's Republic, yet... we have achieved far less than we should have.—Chairman Hua Guofeng.

The main problem now facing us is that our agricultural expansion cannot as yet keep up with the needs of industrial development, and at times can not even keep up with the needs of a growing population. Many important products of the light and textile industries are insufficient in quantity, poor in quality and limited in variety, so there are not enough marketable goods.—Chairman Hua Guofeng.

Capital construction is too large in scale and spread over too many projects for the country's financial and material resources at present, and returns from investment are very unsatisfactory.—Zhang Jingfu, Minister of Finance.

In management, there is shocking confusion and waste in some production units and in some organisations not engaged in production. Zhang Jingfu.

Enterprises which turn out low-quality, high-cost, unmarketable goods and show a deficit must undergo a shake-up. Some should cease operation, while others may be amalgamated, or change over to other products.—Vice-Premier Yu Qiuli, Head of the State Planning Commission.

Twenty-four per cent of our State industrial enterprises are in urgent degrees of loss.—Chairman Hua Guofeng.

SPEAKERS at the National People's Congress in June had plenty of good things to say about the Chinese economy—not least about the way it has been run during the past two years since the present leadership has been in full control. But, the novel feature, as the above quotations show, was that they also told us what was wrong, and often in blunter language than that used by most Western commentators.

The new leadership has now given itself three years to put things right—three years of "readjustment, restructuring, consolidation and improvement"—starting from January 1979—in which in Western terms it will accept deflationary policies of slower growth.

In that time the leadership hopes to cut back some of the surplus fat from the country's inefficient Soviet-style system of management; direct funds to sectors where the returns on investment are highest, and extract increased productivity both on the land and in industry. The key strands of policy during these three years are:

• Increasing agricultural incomes. On official Chinese figures, per capita incomes of commune members rose by 13.7

per cent in 1978 over the previous year to 73.9 yuan. During the current year the State procurement price for grain is being raised by 20 per cent and for other farm products by an average of 24.8 per cent.

Vice-Premier Yu Qiuli claimed in his speech to the Congress that this amounted to the largest increase in farm prices since independence 30 years ago. It is being backed by a substantial increase in investment in agriculture which will absorb 14 per cent of the capital construction budget as compared with 10.7 per cent last year.

Food

As Hua's speech implied, China needs to grow more food to feed its growing population and to give its urban workers an improved and more varied diet. Per capita grain consumption is only marginally above what it was 20 years ago. Vice-Premier Li Xiannian admitted recently that 100m people were still underfed.

In Guangdong province, the southern province bordering Hong Kong, the official Press recently reported a sharp decline in State purchases of beef, ducks, eggs and other subsidiary farm products since 1965 and said that supplies to Canton were down.

At the same time the lagging of agricultural growth means that there are fewer agricultural commodities in export (buyers at this year's Canton fair found a shortage of supplies) and that the expansion of light industry is curtailed by an insufficient flow of raw materials.

In effect, the deal being proposed to China's 800m peasants, weary from years of turmoil and exhortation to still greater effort, is an offer of higher living standards and more consumer goods if they work harder and produce more. The success of the deal is central to the whole economic strategy. It is also the most important test of Peking's new reliance on the price mechanism in get higher yields. The radicals within the party are still denouncing this use of material incentives.

Beyond this difficulty is that the implied increase in trade between countryside and town was congested. In short, there was a great deal of waste in an ill-co-ordinated programme.

Supporting the high growth rates was an increase in the State's capital construction budget by 34 per cent over 1977 to 39.8bn Yuan. This year is likely to be held practically constant at 40bn Yuan. Yu Qiuli's speech suggests that nationwide there may even be a reduction in construction expenditure when local budgets and other outlays are included.

Within the State budget, the highest allocations are focused

on where the bottlenecks have been greatest: coal, oil, electricity, transport and building material. Overall, however, the share of heavy industry in investment is being cut from 54.7 per cent in 1978 to 48.8 per cent this year.

• Overhauling the bureaucracy and establishing new methods of accountability and control for the vast array of organisations and enterprises that fall under the State. Zhang Jingfu said: "Where there should be centralisation there isn't, and where there should be decentralisation, it's missing."

Chinese officials also justify the jealous competition between ministries and in the overlapping responsibilities of central and local authorities none of whose powers of decision are clearly defined.

Reforms intended include more decentralisation to the provinces; allowing State enterprises more independence in management and greater control over their funds; encouraging the use of market concepts as a more rational base for decision making; using the banking system to exert greater financial control; and establishing new semi-autonomous organisations to cut through red tape.

• A stronger foreign trade sector. Foreign trade as a proportion of GNP has been slipping from an already small 3.2 per cent in 1959 to only 3.7 per cent in 1978. The intention is to reverse that trend. Although there has been a shift back towards emphasising self-sufficiency this year after the headlong plunge towards imports of foreign technology initiated by Deng last year—a short cut to faster growth—China is still looking towards a substantial increase in plant imports.

The value of imports is expected to rise this year by 32 per cent to \$14.3bn. At the same time the government is putting more muscle into increasing export earnings and looking in new arenas of compensation trade, joint ventures and tourism to achieve it.

Exports are planned to increase 14.7 per cent over last year to \$11.1bn. This still leaves a substantial trade deficit, part of which will be covered by increased horticulture. Western experts reckon that Peking is prepared for a ceiling of \$23.5-30bn of outstanding debt by 1985. But how far it is prepared to borrow, clearly will depend heavily on the success of offshore oil exploration.

This stabilisation programme is largely the work of Chen Yun, the 79-year-old official brought back to high office in December and made a Vice-

SELECTED ECONOMIC INDICATORS												
	1952	1957	1962	1970	1971	1972	1973	1974	1975	1976	1977	1978
GNP (1977 Shn)	92	128	172	244	261	273	308	320	312	312	370	407 (590)
Population (m)	570	640	754	847	867	886	906	924	943	962	983	1,014 (975)
Per capita GNP (in 1977 \$)	162	201	228	301	308	341	346	363	355	377	405 (605)	
Agricultural production index	84	100	101	126	130	126	142	146	148	146	151	151
Total grain (m tonnes)	161	191	194	243	246	266	275	284	285	286	(283)	295 (305)
Cotton (m tonnes)	1.3	1.6	1.6	2.0	2.2	2.1	2.6	2.5	2.4	2.3	2.0	(2.1) 2.2 (2.0)
Industrial production index	48	100	199	316	349	335	436	455	502	502	572	646
Electric power (m kWh)	7.3	10.3	42.0	72.0	86.0	93.0	101.0	108.0	121.0	128.0	141.0	162 (256)
Coal (m tonnes)	66.5	150.7	232.2	327.4	353.6	376.5	398.1	410.6	479.6	488.0	546.6	605 (618)
Crude oil (m tonnes)	0.4	1.5	11.0	28.2	36.7	43.1	51.8	65.8	74.3	83.6	90.3	100.3 (104)
Crude Steel (m tonnes)	1.3	5.4	12.2	17.8	21.0	23.0	25.0	21.0	24.0	24.0	23.7	31.7 (31.7)
Cement (m tonnes)	2.9	6.9	16.3	26.6	31.0	38.1	41.0	37.3	47.1	49.3	56.2	67.8 (65.2)
Foreign trade (current Shn)	1.9	3.1	3.9	4.3	4.8	6.0	10.3	14.1	14.6	13.3	15.1	20.8 (22)
Exports, fob	0.9	1.6	2.0	2.1	2.5	3.2	5.1	6.7	7.2	7.3	8.0	10.2 (10.4)
Imports, cif	1.0	1.4	1.8	2.2	2.3	2.8	5.2	7.4	7.4	6.9	7.1	10.6 (11.5)

Source: CIA Economic indicators and China's State Statistical Bureau. The American figures are preliminary. The Chinese figures are in parentheses. The Chinese figure for GNP is based on a statement by the Foreign Trade Ministry to the FT delegation that foreign trade accounted for 3.7 per cent of China's GNP in 1978. The Chinese authorities have not issued official figures for China's GNP.

Exchange rate \$1=yuan 1.62

premier in June with status probably second only to Deng. He carried through a similar programme of restructuring the economy and checking inflation in the early 1950s before Mao got impatient with what he judged was too slow a pace of change. The overstraining of the economy in the last two years and the recent increases in incomes for peasants and workers have again renewed the dangers of inflation.

Trouble

By December last year it was clear that the ambitious plans announced by Chairman Hua in February 1978 for completing 120 major capital projects by 1985 as a step towards transforming China into a major industrial power by the end of the century were running into trouble. Hua's approach was reminiscent of the same planning by assault that led to Mao's Great Leap Forward. So too was Deng's apparent faith in the power of foreign technology to achieve rapid modernisation.

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A billion mouths to feed

AGRICULTURE

THE GROWTH of agriculture and the need to achieve a surplus of food over population is China's most basic economic problem. It is compounded by the fact that agriculture supplies a high proportion of the raw materials for light industry, which in turn provides about 40 per cent of the exports.

The growth of heavy industry also depends on agriculture since it has to feed an ever-growing urban population; and the raising of the standard of living is dependent on it since, for huge numbers of the rural population, a better life still means a better diet rather than more consumer hardware.

While the Chinese claim to have reduced the population increase to only 1 per cent, they currently admit to a population figure of 958m (the statistic published at the recent National People's Congress, minus the figure for the "province" of Taiwan). Some U.S. demographers believe on good grounds that the figure is well over 1bn.

Until recently, the increase rate was probably at least 2 per cent, which is not much less than the long-run trend of 2.25 per cent annual increase in grain production. Hence the extreme difficulty the leadership faces in trying to provide that most elementary factor in a rising standard of living: feeding the people better.

However, the leadership officially remains optimistic, but while it has abandoned the extravagant industrial targets it put out last year, it continues to put forward the 1985 planned grain output figure of 400m tons. This will require a 4 per cent increase annually in ton-

nage which the country seems unlikely to attain.

Grain production for 1978 was said at the recent Congress to be 30.75m tons, 7.8 per cent up on the previous year. If this figure is correct, it is a healthy increase and marks up for the bad years of 1973-77, when production stagnated owing to bad weather.

However, it has not put the Chinese much ahead; an annual 2.5 per cent increase since 1973 would have given them 30.5m tons, so they are barely ahead of the long-term trend. While there is no reason to think that the Chinese have misinterpreted the total, they have revised the figure upwards several times since last autumn, which suggests at least an uncertain statistical reporting service.

Cautiously, China's planners have set a target for the current year of 31.2m tons, just 2.6 per cent above the figure for last year. If they can genuinely keep the population growth at 1 per cent, it should provide some scope for economic growth, but many observers still believe they have some way to go before they can induce the peasants to accept small families and rigorous birth control measures.

Modest

In fact the prospects for the current year are modest. In Sichuan only 80 per cent of the rice could be transplanted owing to drought. In the north China plain the wheat was planted late in very dry weather. Good spring rain brought over-rapid growth and problems such as small ears and aphid infestation.

In central China the crops were set back owing to the cold, wet spring, and in some places rice had to be replaced by wheat, though this damage

could be repaired by good weather and a late autumn. Irrigation will have been affected since the drought last year meant that reservoir levels were low.

Most tellingly, however, the crops in the north-east, which last year produced a good slice of the big rise from 28.5m tons in 1977, are unlikely to repeat the jump since the late, cold spring has affected the spring wheat.

Peking's biggest worry is where future growth is to come from. China's well-watered, fertile land always has been intensively cultivated, and while modern methods such as powered irrigation and chemical fertilisers have made some difference, the limits on what can be achieved readily may be in sight already.

There is very little worthwhile new land that can be brought into cultivation. The density of habitation is already very high; in the Sichuan basin (admittedly the most densely populated agricultural area of China) the average amount of farmland per head is 1.2 mu (6 mu = 1 acre).

While China now has reasonable supplies of chemical fertiliser (8.7m tons produced last year, in terms of nutrient content) the experience required to use it properly is lacking. At communities outside Shenyang and Chengdu the peasants complained that it made the crops grow too quickly, with ears that were too small. Both communities would have liked more organic fertiliser.

These complaints are typical of peasant communities that are not using chemicals correctly. To do so requires knowledge and experience that the Chinese authorities are currently unable to supply.

The destruction of research and the denigration of the

academic experts during the years of the Gang of Four has put the development of a good agricultural extension service back many years. While there is an elementary system of spreading agricultural techniques to the countryside from the academic research centres, no experts have been trained since the middle 1960s.

Development of improved seed strains has been via selection rather than breeding, and while the post-Mao attitude to foreign techniques may mean the import of expertise and seed strains, it still takes some years to adapt these to Chinese conditions and climate.

Irrigation

More irrigation is one key to increased production, but the problem here is the difficulty of bringing water to the much more inaccessible areas remaining dry. Then there is the competition between the needs of the hydro-electric industry and agriculture—further offtake of water for farming would hamper power generation even more than it already does in dry spells.

In the north China plain, perennially dry but nonetheless a vital wheat-growing area, the sinking of tube wells has lowered the water table. There is some doubt about the capacity of rainfall and other water seepage to replace it, while unwise irrigation without adequate drainage has caused alkalisation of the soil.

Mechanisation is another development that could help, although the government wisely has decided to give up the attempt to mechanise wholesale. In one locality, in the open plains of the north east, U.S.-style farm machinery has been used most successfully. Elsewhere in China, though, the fields are small and often ter-

raced and machinery is not raised and machinery is not much use.

What the communes need is farm equipment to help them harvest one crop and put in another as fast as possible to step up multiple cropping. What they have at present is either too unreliable or too complicated. Tractors large and small seem to be used mainly for transport, while rice transplanters, each of which is managed by three people, are far from fully automated.

Rising government alarm at these constraints accounts for the redirection of economic policy this year towards bigger investment in agriculture and more incentives for the peasants. Last December, confronted with a rapidly over-expanding economy, the central committee revised its ambitious development plans in favour of a new priority for agriculture and light industry, much of which depends on agricultural raw materials.

The leadership decided to

Traditional farming in Sichuan province. Despite lack of modern machinery China produces most of its own food.

bigger schemes, such as its proposed development of the grasslands in western China for improved animal husbandry.

One expert view of China's agriculture is that it may be as much as ten years before there is significant progress in growth. The training of a new generation of agricultural scientists, the development of experience in seed breeding and the proper use of fertilisers, and the construction of costly and difficult water control will take a long time to develop. In the meantime, it is no wonder that one of China's main campaigns is pressing for rigorous population control.

C.M.

Community role restored

BANKING

THE PEOPLE'S BANK of China, Peking's central bank and by far its most important banking organisation, has begun to resume and even expand the part it played in managing the economy before the disruptive era of the Gang of Four. As the leadership in Peking introduces more decentralisation, greater responsibility for savings, investment and for overseeing the fulfilment of contracts between enterprises, on which the whole interlocking economic system rests, will fall on local bank managers. The powers of the Bank are being strengthened to ensure that it can carry out these functions properly.

The People's Bank began its rehabilitation at an important banking conference, last February. The conference report commented, with devastating truth that "the efficiency of our banks lags behind that of the 17-year period preceding the Cultural Revolution, and trails far behind banks in other parts of the world." The conference summoned to instruct bank managers in how to play a positive role in the "readjustment" policy announced tighter rules for loans, more disciplinary power for managers to enforce banking regulations and higher interest rates from April 1 this year to attract more deposits.

Under the Gang of Four, the Bank's authority was completely undermined, as was that of all the economically-minded party and government leaders. According to sources in the Bank, the radical Gang attacked the deposit business by saying that anyone who put money in the bank should not get interest as it was part of capitalist exploitation (though interest was never officially abolished). Furthermore the Gang said that those who put too much money in the bank would inevitably become bourgeois, and added that strict terms for loans would lead to capitalism. Fear of seeming capitalist or bourgeois in that period of arbitrary accusation and arrest affected savings and loan policy, and the Bank's influence over the economy declined.

Following the Bank's rehabilitation since the Gang period, the leadership is attempting to use it as it did in the past, as a lever of control. The People's Bank is intended to operate in every stratum of the economy, and at the highest level it now plays a part in the formation of the state plan and the budget. Planning in China is in physical rather than monetary terms, and the money supply is decided to suit the planned supply of goods, according to the system of material balances used in planning. The Bank is consulted to ensure that the currency in circulation is adjusted to the expected level of output and to examine construction plans to make certain that they do not get out of control, as they evidently did last year.

annual budget. If it does, the branch must apply to the next level up.

The Bank does not really play an important role in industry as it might in a Western economy. Although it has some experts in particular industrial fields (the steel industry, for instance), it mainly uses staff in other government departments to check on the efficiency of a particular enterprise.

The distribution of loans is normally dictated by the needs of the state plan, but the current policy is to give priority to enterprises which in the judgment of the Bank are the most successful. This is certainly an innovation in China, where previously the plan came first and inefficient enterprises were supported by the Bank to help them fulfil their targets because, even if non-commercial, they were thought to be necessary. The Bank now assesses the profitability of an enterprise and the extent to which its products are needed, either on the home market or for foreign trade. The most efficient factory making the most desirable goods gets the biggest and longest-term loan.

There is no doubt that this policy is being interpreted strictly. After the uncheduled outburst of capital construction last year (the funds for which did not come from the People's Bank, however, but from ill-planned state grants), the Bank is looking very carefully at loan applications. At the banking conference in Peking in February it was ruled that banks should have the power to refuse loans even though they might be recommended by a "leading comrade."

The Bank's third management tool is its control of the circulation of money. Besides being the bank of issue, it also supervises all transactions above 30 Yuan (just over £9), which according to the regulations must go through its books. If an enterprise does not pay for raw materials or products, the bank can either insist that it makes compensation or it can simply transfer the money out of its account. It can also prevent an enterprise making large profits through overcharging as this, too, will be obvious from its records.

In the same way the Bank can supervise output and construction. It can see from its books if too much raw material is being used, and it can criticise low quality. If its criticisms are ignored, it can stop loans or demand higher interest. Where construction is extravagant, it can either admonish an enterprise itself or, if this has no effect, refer the matter directly to the State Council. To avoid this situation, when planning takes place at the different levels of the hierarchy, the Bank must be consulted. Clearly, the People's Bank, with its 36,000 branches and 360,000 staff, is an influential organisation and one that will play an increasingly powerful role.

C.M.

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دستورالعمل

Muddling through

INDUSTRY

MAINTAINING a high rate of investment in industry has been one of China's central priorities for the past 30 years. There is now a larger diversified industrial base and the country produces most of the materials, machinery and consumer goods that it needs. The fact that foreign trade represents less than 4 per cent of GNP illustrates the degree of independence that has been achieved.

But China's industrial performance has been held back by weaknesses in the planning system and in the management of individual enterprises. Because of political and ideological conflicts there has been an erratic approach to foreign technology.

There has been confusion over the relative importance to be attached to capital intensive large-scale industry and small-scale rural industry. The result is a lack of balance which is aggravated by persistent shortages in basic sectors of the economy, notably electric power, transport and building materials.

The present regime has adopted an industrial policy which is designed gradually to eliminate these weaknesses and to set the economy on the road towards balanced development.

The ultimate objectives are the same as they were in 1949—rapid economic growth and national independence, especially in defence—but the methods are based on a more realistic assessment of the skills, experience and resources which exist.

After the euphoria of early 1978, when a series of over-ambitious goals were proclaimed, it is realised that China cannot do everything at once. There is an urgent need to make full use of existing investment before embarking on massive new commitments.

The implications of this re-appraisal were evident at last month's National People's Congress. The first two points made by Vice-Premier Yu Qijun in his comments on the 1979 economic plan were, first, that efforts should be concentrated on developing agriculture at higher speed and, second, that everything possible should be done to speed the growth of light industry.

The coal, petroleum, power, transport and building mater-

ials industries would be strengthened, but production in other industries "would be arranged in accordance with possible fuel and power supplies". The proportion of the central government budget allocated to heavy industry would be reduced.

The range of products covered by light industry is wide. It includes textiles, footwear, ceramics, handicrafts, canned foods, consumer electronics, bicycles, sewing machines and a host of other consumer items. Some of these activities were well established in China long before 1949; while there is a need for modern designs and modern technology, they pose fewer problems of management and organisation than steel or petro-chemical plants.

Vital

A rapid expansion of this sector serves several purposes which are vital to the Chinese economy over the next few years. Because it is labour intensive, it will help to solve the unemployment problem. It provides an important market for the products of agriculture.

An improvement in the quantity and quality of Chinese consumer goods is necessary to meet the people's aspirations for higher standards of living.

Products of light industry, in which China has a comparative advantage, should be a dynamic element in the country's export trade, helping to finance imports of capital goods. Finally, investment in light industry should yield quicker returns than investment in high-technology heavy industry.

A recent editorial in the Workers Daily noted that between 1950 and 1977 profits and taxes paid to the central government by the light and textile industries accounted for 29 per cent of the state's revenues. This was equivalent to 70 per cent of the state's investment for capital construction and 14 times the investment in light and textile industries.

For each yuan spent on light and textile industries the state received 52 cents in the form of profits and taxes, compared to only six cents received from heavy industry. The editorial commented that the new priority for light industry would temporarily delay the growth of heavy industry, but "it will be more than compensated, because after eight or ten years

funds for the construction of more heavy industrial enterprises will have been accumulated."

The switch of emphasis towards light industry cannot be achieved by government decree. The manufacturing operations may be relatively simple, but the task of mobilising the many thousands of small enterprises scattered around the country is formidable.

The bureaucracy, both central and local, has been geared to the needs of heavy industry; it is the managers of heavy industrial enterprises who know how to work the planning and allocation system. Moreover, if the manufacturers of light industrial products are to play a bigger part in satisfying consumer needs and in promoting exports, they will need to be re-adjusted to changing market requirements.

It is in this sector more than any other that the planned, socialist economy has to be modified by the injection of market economy principles—and which the Chinese leaders say they are determined to achieve.

Direct contact with customers is essential. A model of what can be done is the Shanghai Leather Shoe Factory, which this year is exporting about 500,000 pairs of ladies' shoes to customers in Australia, the U.S., Hong Kong and elsewhere.

Not only are the designs and styles well suited to the world market but the managers appear to be in regular contact with their international customers and to be relatively free of the bureaucraticencies of which other enterprises complained.

The factory has its own retail store in Shanghai.

In textiles, garments, food processing, toys and other branches of light industry there is scope for co-operation with foreign companies which can provide equipment, know-how and access to world markets. In electronics, particularly, the Chinese authorities are hoping that the new law on joint ventures will stimulate the inflow of foreign capital and technology.

Matsushita, the Japanese consumer electronics company which recently signed an agreement to manufacture TV sets in China, hopes to develop collaboration with the Chinese on a wide range of products, perhaps involving other Japanese manufacturers. At the same time the Chinese themselves are sending out missions to learn

more about foreign markets—consumer tastes, distribution channels and marketing arrangements.

The expansion of light industry cannot take place without a reliable supply of equipment, components and materials from the heavy industrial enterprises. An improvement in the efficiency of heavy industry is one of the goals to be achieved during the three-year period of re-adjustment.

Visits to factories making machine tools, steam turbines and electronic computers show that the Chinese are capable of developing and manufacturing complex machinery on the basis of their own efforts, since they have generally moved beyond the original East European designs. While the policy of self-reliance has often been carried to extreme lengths, factories have shown remarkable ingenuity in overcoming production and supply problems.

Moreover, the managers of these plants are well aware of their technical shortcomings and have a pretty clear idea of what should be done about them. At the Shenyang No. 1 machine tool factory one of the producers is a practical multi-spindle semi-automatic lathe, used mainly in the automotive and tractor industries. In the workshop there is a large display which enables technicians and workers to compare in detail the specifications and performance of this machine with four comparable machine tools made in the U.S., the UK, Italy and the Soviet Union.

The need to reach internationally competitive levels of quality and reliability was strongly emphasised in this and other factories.

The selective application of foreign technology will be necessary to upgrade the performance of heavy industry. In the sectors which supply essential inputs to agriculture and light industry, such as fertilisers, synthetic fibres and plastic materials, China is continuing to place very large orders for complete plants with foreign companies. But for the most part China will probably use a combination of self-help and limited foreign aid to improve what they already have; farm machinery, where there is a need for more efficient engines, modern tractor designs and new production facilities, will be an interesting test of this policy.

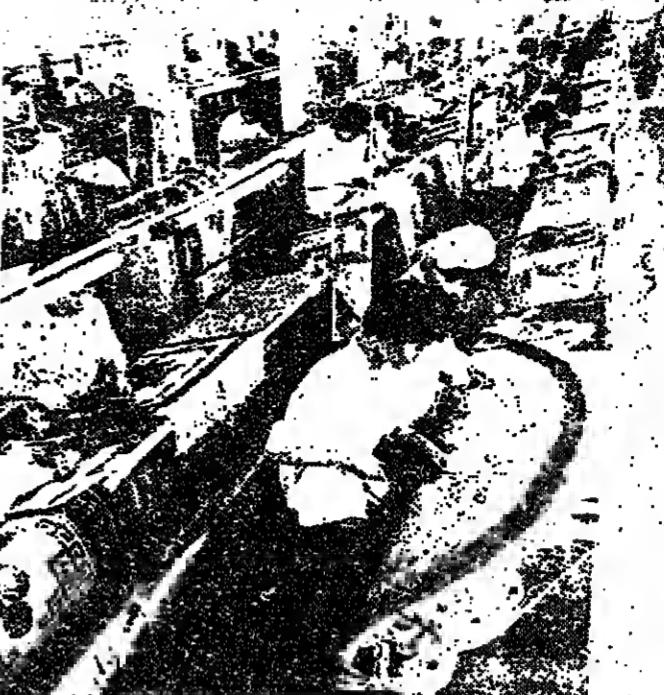
At the same time China will apply a more rational approach

to small-scale rural plants. In principle these plants play a useful role in using local materials and supplying local markets, especially in a country whose transportation and distribution network is under-developed, but the product and technology must be appropriate to small-scale manufacture.

There is enormous scope for improving efficiency at all levels of Chinese industry. Yet it is striking how much has been achieved despite political disruptions and the difficulties imposed by centralised planning. Not only have the Chinese mastered some difficult technologies (especially but not exclusively in defence-related sectors), but they have shown a remarkable capacity for improvisation and muddling through.

Given a stable political environment, rational economic policies and, above all, patience, China is capable of developing a modern industry well-suited to the needs of the country.

G.O.



Woollen carpets being made in a Chinese factory

New mining projects await go-ahead

MINERALS

the upper peninsula of Michigan—which is one of the reasons Kaiser was chosen to do the work, since this company had engineered the Tilden project.

Kaiser's contract, signed last autumn was for the first phase of the project, to provide engineering services for the mine, concentrator, pellet plant and auxiliaries. The project team under Mr. Les Trew has been working out capital and operating costs, obtaining bids for the equipment and preparing a financing plan—all of which will be discussed with the China National Technical Import Corporation and the Ministry of Metallurgical Industry in the next few weeks.

Although steel has moved lower down the list of China's priorities, Kaiser Engineers has received no indication that the Sijiaoying project will be deferred. The hope is that since China, despite its large

iron ore reserves, is a net importer of iron ore, it will be seen as an import-saving project and will be carried through. Moreover China badly needs to update its ore mining technology, most of which dates from the 1940s and 1950s. The Sijiaoying mine is situated close to a main railway line and is well placed for shipping pellets to steel plants in Shanghai and southern China.

The decision on Sijiaoying will be a pointer to China's intentions on how fast the country's mineral resources are to be exploited. Another American company, Bethlehem Steel, is working on a similar iron ore project at Shuichang, also in Hebei province.

In non-ferrous metals, too, there is substantial scope for import-saving, but some of the reserves are in remote areas which will need large investments.

The decision on Sijiaoying will be phased over a longer period than had originally been intended, but the next few months should show how high a priority China now attaches to this sector. One of the questions remaining to be answered is how the use of compensation trading will be reconciled with China's large internal needs for non-ferrous metals.

G.O.



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Q What did the London Festival Ballet and the First International Agricultural Machinery Exhibition have in common?

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EFFICIENCY

CHINA'S INDUSTRIAL system is plagued by inefficiencies at all levels and it will take a good many years of determined and consistent effort to root them out.

The inefficiencies stem in part from excessive bureaucracy outside the enterprise — the numerous and often overlapping levels of authority, central, provincial and local, whose approval is needed for key decisions.

While the Chinese are now trying to simplify the planning and control arrangements, there must be doubt about whether a genuine decentralisation of authority to the managers of individual enterprises — which would imply a greater responsiveness on their part to customer needs — is compatible with the Government's insistence on the need for centralised allocation of resources.

Within the enterprise the planning system as it has operated so far is not conducive to rational management. Because funds for capital investment and to some extent for working capital have been allocated by the state in the form of grants, there has been little incentive to use the money economically or to earn an adequate return on them. Virtually all the profits of the enterprise are handed over to the state.

Disrupted

Enterprises do not in general deal directly with their customers or their suppliers of raw materials and components. These functions are handled by other agencies and corporations whose role as intermediary between buyer and seller seems increasingly burdensome and unnecessary.

The internal management of factories was disrupted by the turmoil associated with the Cultural Revolution and the Gang of Four (1966-76). Party Revolutionary Committees made it impossible for senior managers to exercise authority over the workforce, while the drive for egalitarianism led to the abandonment of personal incentives for higher performance.

Although a more normal management structure has now been restored to most enterprises and

bonus systems have been reinstated, it seems that the bad work habits engendered during the 1966-76 period are still widespread; productivity of labour is low.

The Chinese authorities are aware of the need to change institutions and attitudes so that these weaknesses can be overcome. Changes within the enterprise and in the relationship between the enterprise and its supervisory authorities are still being debated, but the direction of reform is clear.

Managers are to be put under greater pressure to perform efficiently and given greater autonomy in running their factories. One aspect of this is the planned move from grants to loans in the financing of capital investment. The idea is that the enterprise which receives a loan for a major project will have to account strictly for its disbursement and will be penalised for overruns in cost or construction time. This should lead to better planning and a more sparing use of capital.

At the same time there are suggestions that the depreciation rate will be increased and that enterprises will be allowed to retain a larger proportion of their profits. Thus the more profitable companies should be able to grow faster and provide better salaries and better conditions for their employees.

However, according to a recent article in the Peking Review, the new system does not mean that there will be free competition for capital construction according to the principle of profit. "The state will continue to draw up construction plans and make decisions with regard to the projects to be built in accordance with the socialist principle and in the interests of the people."

A balance is being sought between autonomy and local incentives on the one hand and central control on the other.

Within large enterprises there are moves to push profit responsibility down to the operating units, so that the managers and workers in those units are held accountable for their performance and rewarded accordingly.

In the Anshan steelworks, for example, which has over 200,000 employees, each of the production units which sells to outside customers has its own profit targets. The management

plans to extend this to plants whose output is used internally and to create new accounting units for maintenance and repair, for component manufacture, for welfare services and so on.

Since the beginning of 1978

Anshan has brought in new bonus schemes. One is a comprehensive bonus for all members of a production unit which fulfils its eight targets. (These targets relate to quantity, quality, variety, labour utilisation, raw material consumption, cost, working capital and profit.) Individual bonuses are also paid to workers who make an outstanding contribution by, say, economising on the use of raw materials.

Targets

A senior manager at Anshan told us that since the introduction of these schemes 49 of the 54 production units had achieved their eight targets, compared with only five out of the 54 in the previous year. The attendance rate had improved by about 20 per cent. "There are fewer patients in the hospital," we were told. Bonuses at Anshan average about 14 per cent of the monthly wage.

Both the principle and the mechanics of the bonus system are still matters of controversy. They have had a divisive effect in some plants and there have been reports of strikes, with workers demanding that the same honour should be paid to everyone.

The authorities are anxious that too much stress should not be placed on material rewards.

"Political education is essential — if we relied solely on bonuses, conflicts would occur," we were told at Anshan.

Apart from appealing to the workers' revolutionary spirit (Communist Party members are expected to abstain from taking their bonuses or at least to take a smaller amount than they are entitled to), there is publicity for outstanding workers on factory notice boards and in newspapers. The official line is: "Adhere to the principle of combining moral encouragement with material rewards, with the emphasis on the former."

At the industry level attempts are being made to achieve economies of scale through rationalisation and specialisation. Partly because factories

have been unable to rely on supplies of components, there has been a tendency to integrate backwards in castings, forgings and other items. In some sectors a number of units are being grouped together under one general factory which can allocate work on a logical basis and avoid unnecessary duplication.

At the Shenyang Tractor Factory, which has a capacity of about 20,000 walking tractors a year, we were told of plans to close down some small, uneconomic tractor plants (which had been set up during the Cultural Revolution) and to supply the whole of the North East from one source. The same thing is happening in the fertiliser industry. There are limits to how far rationalisation can be taken on a national basis. In view of transport difficulties, it is being encouraged on a regional and local level.

As the drive for greater efficiency continues, two doubts persist. One is the possibility of resistance to the introduction of techniques and practices borrowed from the capitalist system. The statement attributed to Deng Xiaoping in the early 1960s — "black cat, white cat, as long as it can catch rats it's a good cat" — was violently attacked during the Cultural Revolution as an endorsement of capitalist methods.

That hostility is certainly not dead, but supporters of Deng argue that some Eastern European countries, such as Yugoslavia and Hungary, have succeeded in introducing elements of the market economy without undermining socialism.

Second, there are vested interests at all levels of the bureaucracy which may prove a powerful obstacle to decentralisation. Even if some streamlining is achieved at the provincial and local levels, big investment and planning matters have to be referred to the centre, where the decision-making process is slow.

Co-operation between ministries appears to be weak or non-existent and conflicts can be resolved only at the very highest level; hence decisions tend to be deferred or not taken at all. The authorities have been urging enterprises to emulate management techniques used in Japan and the West; but it is in the structure of government that the biggest reforms are needed.

G.O.

Burdens on the network

TRANSPORT

CHINA'S TRANSPORT system is far from adequate even for the present state of its economy. Peking's recognition of this is an important reason for the introduction of its economic "re-adjustment" policy. Relatedly it became aware that its rail and port facilities were gravely burdened, and to increase it with a further load would be inviting disaster. Speaking with frankness remarkable even in the new climate, the New China News Agency noted in July that the capacity of many stretches of China's main railway lines had reached saturation point, and that some sections could only meet 50 per cent of demand.

Since 75 per cent of China's freight is thought to go by rail, this is a serious problem. As the railways provide the strategic mobility and logistic support for the army, which is deployed along them for lack of other transport, it is also a severe military handicap. The remaining 25 per cent goes by waterway and roads, and while the waterways are reasonably efficient, neither the roads nor the truck industry are anything like adequate for China's needs.

Peking has great difficulties in overcoming in setting up a satisfactory national transport network. The sheer size of the country — (approximately 4,000 km from north to south and 4,800 km from east to west) is an enormous handicap, and it is increased by the fact that the main rivers run only from west to east. Hence these only provide arterial routes from the developed eastern half of the country to the interior, and act as a positive barrier between the urban centres.

The distribution of the country's raw materials and its pattern of industrial development have added to these problems. Most of the coal and iron ore now exploited is in north and north-east China, and the main industrial centres are in the north-east and down the eastern coastal belt.

For political reasons most of the transport effort since 1949 has gone into building links with the western interior. While these also contain rich

sources of raw materials, they do not have the infrastructure and skills to develop them quickly. Now that the leadership's main aim is to expand the economy fast, it is concentrating on the east, but the worn-out railway system is already verging on collapse.

The NCNA revealed that the lines east of the Peking-Canton track carry 85 per cent of the total volume of the country's rail freight, and over the years these lines have been neglected in favour of development elsewhere. On the overburdened eastern stretches steel, coal, ore, imports, exports and consumer goods are seriously delayed while trains queue up or change their routes.

Decision

To try to solve these problems the Railway Ministry recently held a national conference which proposed the reconstruction and repair of old lines, the electrification of some major sections and the expansion of three important junctions, including Peking. But the vital question is how far the Chinese will actually be able to implement the decision when they have so many other pressing economic needs.

Even the rail links outside this eastern area are far from satisfactory despite the investment they have swallowed up. China still has only one main north-south line, from Peking to Canton. A second north-south route, from Talyuan to Liuzhou, is still under construction after eight years of work. There are only two major east-west lines, from the east coast port of Lianyungang to Urumchi in the far west, and from Shanghai to Kunming. These are both of strategic importance since they lead to vital border defence areas, and must therefore be partly taken up with transporting military goods.

The railways' burden has been increased by inadequate general planning. For example, the 1.5m tons capacity steel plant at Panzhuo in Sichuan province ships out all its products to Shanghai nearly 1,000 miles away for finishing, while the Metres and Cutting Edge Plant in Chengdu, also in Sichuan, ships in its special steels, sometimes from Shanghai but as often from Dalian in Paochi but are planning at Peking railway station to speed up delivery.

On the technical side the Chinese are apparently capable of making all their equipment, including electric locomotives. So far they operate only one electrified line (Chengdu to Paochi) but are planning at



The bicycle is still the major means of transport for the Chinese, with nearly 3m cycles in Peking, a city of 10m people

least four more, plus two which they discussed last year with the Japanese, Peking-Tianning and Peking-Zhengzhou. The electrification and double-tracking of the Kowloon-Canton line has also been under discussion with British Rail.

Chinese railway problems appear to stem not so much from lack of technical knowledge, which is adequate for their needs, as from long delays in building and repair of worn track and equipment. The People's Liberation Army (PLA) railway corps is responsible for building new lines.

Factions

Maintenance is the job of the local railway bureaux, which come under the Railway Ministry, and during and after the Cultural Revolution these were heavily politicised and drawn into the factional fighting of the times. This affected the running of the trains, the highway system is different. It is at present minimal and apart from a few trunk routes like the road to Tibet, surfaced roads exist only in urban and suburban areas. Truck production, extremely low and inefficient by western standards, is commensurate with that. However, in its present drive to converge on Peking it is unlikely to expand motor transport.

Aviation is an important means of communication in China (officials at all levels are constantly attending meetings, conferences and exhibitions all over the country), and the China Aviation Administration Corporation (CAAC) now flies 545 internal flights a week. Before the "readjustment" the Chinese were showing interest in the British Aerospace 146 feeder liner and the Airbus, but this now seems to have evaporated.

In any case, aviation is not significant for freight.

Relevant to China's internal transport is the state of the ports. Foreign ships still experience long delays because of poor equipment and shallow waters mean that large carriers cannot be accommodated. Last year the Chinese approached the Danish company East Asiatic with a project for modernising eight ports, but this has been postponed. So, it seems, has the proposal to the Dutch Port and Delta Consortium, which was hoping for a \$1bn harbour modernisation contract including the construction of a coal handling port at Lianyungang.

Containerisation is a general objective, and some containers are to be seen on the dockside at Haikou (Hainan), the port of Canton. Building work is in progress there, but the People's Daily said recently that not even the first stage of construction had been completed after five years' work. Besides, Chinese roads and bridges would need total reconstruction before container transport becomes a feasible proposition. A container truck which recently made the journey from Hong Kong to Canton had to cross three rivers by ferry. This is typical of the kind of difficulties that face the leadership in bringing the transport system as a whole up to modern levels, and to iron them all out across the country will take many years.

C.M.

CHINA'S TRANSPORT PRODUCTION

	1977	1978
Motor vehicles (units)	125,400	148,100
Internal combustion engines (m.h.p.)	27,411	38,100
Locomotives (units)	293	521
Freight-wagons (units)	6,396	16,950
Steel ships (tons)	64,300	365,900

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كما من الأفضل

A plan to correct the imbalances

STEEL

ANSHAN IN North West China is one of the world's largest steelworks. It produced 6.8m tonnes of steel last year and total employment, including the iron ore mines, is over 200,000, more than the whole of the British Steel Corporation put together. Yet Anshan suffers from all the weaknesses which have made steel a major bottleneck in the Chinese economy. The equipment, most of it designed and built in China, is a mixture of old and new.

Although there are extensive local iron ore reserves, there is not enough ore being produced to feed the blast furnaces. The capacity of the rolling mills is too small to absorb the output of the steel-making shops. Productivity of labour is low, partly because of the disruptions caused during the Gang of Four period but partly also because of the difficulty of managing such a huge, sprawling site.

"Since it represents more than a fifth of China's steel-making capacity the modernisation of Anshan is vital to the Government's hopes for an efficient industry which can meet the

country's steel requirements. At the time of our visit a revised development plan, geared to the three-year period of reappraisal decreed by the authorities, was beginning to take shape.

The emphasis is on correcting imbalances and making the best use of existing facilities. The management is looking for a well-balanced works with a capacity of around 7m tonnes. Some of the open-hearth furnaces will be replaced by a third large oxygen converter.

A continuous casting machine will be installed (this will probably be imported) and there are tentative plans for a new wire mill and a tube mill.

The iron ore mines are being expanded; some preliminary talks have been held with United States Steel on this.

At the same time the organisation of the works is being simplified, with profit responsibility being devolved to the individual units.

Quality

Plans for an immediate and dramatic expansion of capacity have been deferred: This year's budget calls for an output of 6.7m tonnes, slightly less than last year. "During the period of readjustment," we were told, "our aim is to reduce cost and improve quality."

The ambitious project to construct a new integrated works north-west of the present site, with an ultimate capacity of 8m tonnes a year, is still on the table and some preliminary work has been done on it, but it is unlikely to go ahead until

the end of the decade.

The Chinese badly need more steelmaking capacity—last year they imported over 8m tonnes, mostly from Japan—and yet their existing plants have been operating well below capacity, through equipment deficiencies, lack of power or for other reasons.

The outstanding case of bad planning is the Wuhan works in central China: nearly \$500m worth of Japanese and German equipment has been installed but the start-up has been delayed because sufficient power is not available.

The equipment for the Wuhan expansion, ordered in 1974, included a hot strip mill and other plant from a Japanese group led by Nippon Steel, while Demag and other German companies supplied a continuous caster, a cold mill and a galvan-

ising line. The Ministry of Metallurgical Industry is studying several alternatives for supplying power to Wuhan, including a gas turbine power station or a gas turbine power station on which several foreign companies have submitted offers.

With so much valuable plant under-utilised there is a reluctance to launch into massive new projects. Since the heady days of early 1978, when a target of 80m tonnes of capacity by 1985 was proclaimed, steel has been moved down the list of priorities. As the Minister, Tang Ke, said to us in Peking: "We have got to be realistic." The immediate need, he stressed, was to improve productivity.

How the reappraisal will affect the size and timing of investment in steel is far from clear. After some months of re-negotiation the new Baoshan steelworks outside Shanghai, to be built by Nippon Steel, is now going ahead. This is the biggest single project within the China-Japan trade agreement. It will have a capacity of 8m tonnes a year to be reached in two stages, and is designed to supply the engineering industries of Shanghai, which at present are seriously short of iron and steel.

Complaints

The plan for another new works, at Ji Dong in Hebei province, which was to have a capacity of 10m tonnes or more, appears to have been deferred.

This was the project for which a German consortium including Schloemann-Siemag, GHH-Sterkrete, MAN, Siemens and Thyssen had high hopes. With an estimated cost of \$100m, the Ji Dong works was to have four blast furnaces, each with a capacity of 10,000 tonnes per day, and two oxygen steelmaking shops with seven 330-tonne converters, as well as a heavy plate mill, a hot strip mill and a cold rolling mill. Officials at the Ministry of Metallurgical Industry indicate that the project will go ahead, but on a time-scale yet to be determined.

Yet if the more ambitious projects have been deferred or

scaled down, the Chinese still

will be spending large sums on their steel industry and some of it seems certain to involve foreign equipment. In the case of Shoudu, for instance, there is apparently a desire to order British equipment, but there are familiar complaints that the prices are too high and an insistence that the imported equipment must be paid for by exports of steel from the plant.

Both the manager at Shoudu and Minister Tang Ke were emphatic that the Davy and British Steel Corporation, if they wanted the business, would have to help China sell steel in export markets.

Attempts are being made to convince Peking that it makes little sense to sell Chinese-made steel on an over-supplied world market, especially when China needs all the steel she can make for her own consumption. If China insists on compensation trade, which Davy and BSC are quite prepared to consider, it would be more logical to make use of the non-ferrous metals and special qualities of coking coal which BSC has to import from somewhere and which are available in China—or could be made available by the time the steel-making equipment is shipped.

In the meantime there are other problems which have to be solved. One is the need to improve the supply and quality

of iron ore and coking coal.

Although there are large reserves of both these materials, much of the iron ore is of low grade and there has been inadequate investment in beneficiation. Kaiser Engineers and Bethlehem Steel of the U.S. are carrying out engineering studies on two projected iron or mines in Hebei province.

Another problem is the lack of capacity for alloy steels. Discussions have been held with the Japanese and with the U.S. over plans for upgrading some of China's existing special steel plants and for building new ones.

Minister Tang Ke made it clear to us that this sector remained a high priority and that there certainly would be business for foreign companies. More concrete negotiations are expected to be resumed in the next few months.

G.O.

CHEMICALS

AT LIAOYANG, 30 miles south of Shenyang in the north-western part of China, some 40,000 Chinese and about 120 foreigners (mainly French) are working to complete one of the country's largest petrochemical complexes. The project is running late, partly because of its size, partly because of design changes and partly, we are told, because of disruption caused by the Gang of Four.

The contract was placed in September 1973 with a group of French companies led by Technip and Speichim and the complex was due to be in operation last year; commissioning is now expected to be completed by the end of 1980.

The complex includes a catalytic reformer, steam cracker and all the intermediate chemicals for nylon and polyester fibre; the plant is the responsibility of the Ministry of Textile Industry.

In addition to the French companies, which include Rhone-Poulenc, F. Uhde of Germany has built a high-density polyethylene plant and Snam Progetti of Italy a polypropylene plant; both these are completed, awaiting supplies of ethylene and propylene. Virtually all the equipment is imported except for the polyester spinning line and two of the three nylon spinning lines. There are tentative plans for producing polypropylene fibre at a later stage.

The complex has been built on a green-field site, and construction involves the familiar Chinese mixture of ox-carts and modern earthmoving equipment, mostly imported from Japan. As at the Peking petrochemical works, a large satellite town has been created, with its own hospital, schools and department stores. About 300 Chinese were sent to Europe for training. The number of foreigners on the site is expected to reach a peak of about 300 next spring, when commissioning is due to start. If all goes well, they should all have left by the end of the year.

The LiaoYang contract was part of the big wave of orders for petrochemical, synthetic fibre

and fertiliser plants placed in the 1972-75 period. Other big fibre plants have been built at Shanghai, which has already been commissioned, and at Tianjin, still under construction; most of the equipment for these two sites was purchased from Japan and West Germany.

On the fertiliser side by far the largest contract went to Pullman Kellogg, with eight ammonia and eight urea plants; the latter were handled by Kellogg's Dutch subsidiary. The UK's share of contracts during this period was small; Humphreys and Glasgow supplied a methanol plant which forms part of a complex being built by Speichim.

Another wave of ordering began in 1977 and reached a peak towards the end of last year. Again the emphasis is on using China's heavy crude oil as the basis for producing materials needed in agriculture, textiles and light industry. Two of the biggest orders were for aromatics complexes to be built at Shanghai and Nanjing by Lurgi; the latter is associated with the world's biggest polyester polycondensation plant, built by another German company, Zimmer, which is a Davy subsidiary.

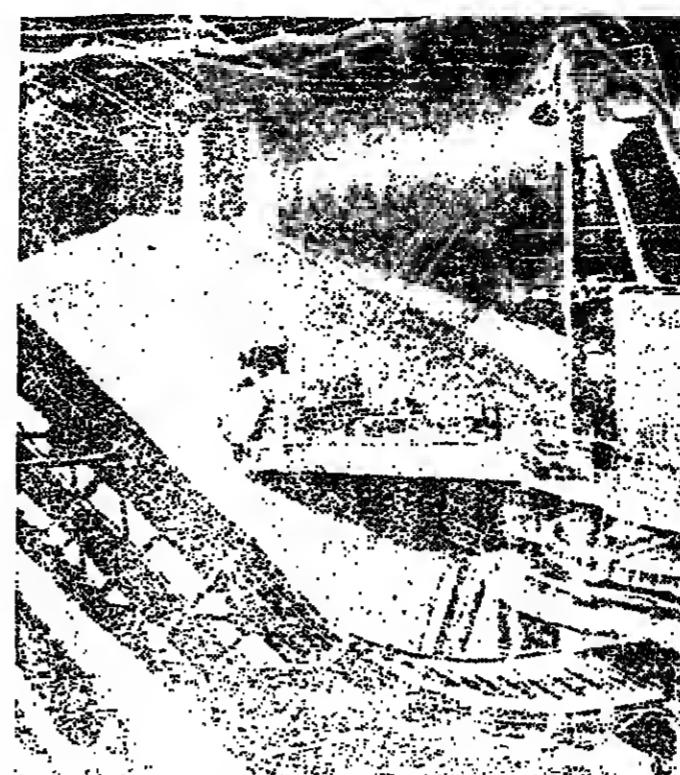
Lurgi also won a significant order for a coal gasification plant, to produce ammonia in Peking; this technology may be used in parts of the country which have coal resources but cannot economically be supplied with oil. All the Lurgi contracts are on the basis of cash payment.

Among British orders are Davy's contracts for two oxo-alcohol plants and a synthesis gas plant and a Ciba contract for high-density polyethylene. Pullman Kellogg has won some further business, but the lion's share has again gone to German and Japanese companies.

The Chinese now have a huge construction programme which may strain their management and engineering resources, but foreign contractors believe China now has sufficient experience of building and operating similar plants to carry through the programme successfully.

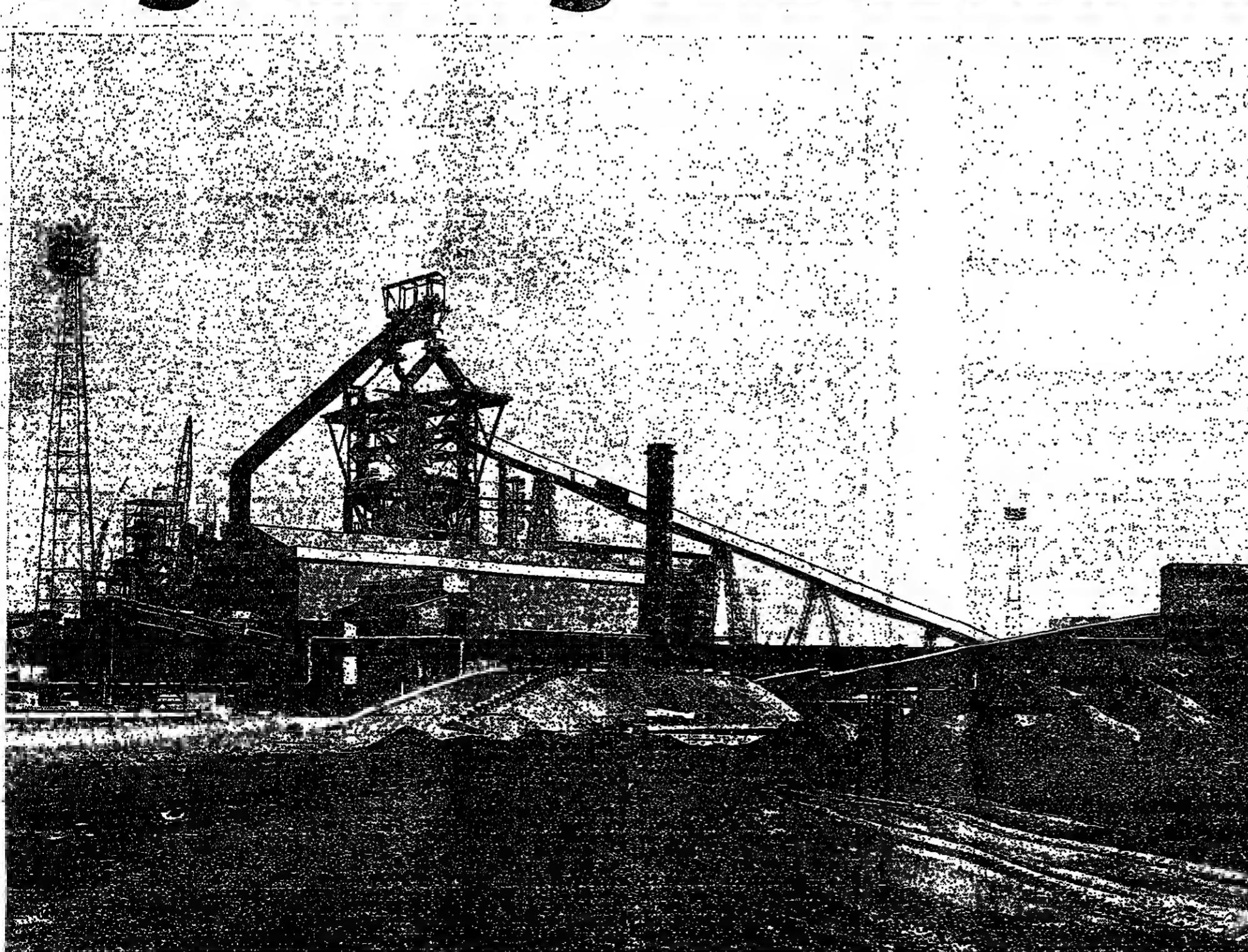
G.O.

Huge orders for plant



A fertiliser store at a Japanese-built chemical plant in Sichuan

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INDUSTRY

Borrowing ideas from abroad

FOREIGN TECHNOLOGY

AT THE No. 13 radio factory in Shanghai a 1,100-strong workforce, including 300 engineers and technicians, is turning out about 100 computers a year. These are Chinese-designed computers, belonging to two families, the DJS series and the TQ series, some models of which are also manufactured in Peking and other cities. The Shanghai factory, specialising in computers since 1966, is under the direct control of the Shanghai Electronic Computer Corporation, which in turn reports to the Shanghai Bureau of Meters and Instruments. General supervision of the electronics industry is exercised by the Fourth Ministry of Machine Building in Peking, but as in most other sectors centralised planning is tempered by a considerable amount of local initiative. Important users or potential users of computers, like the Daqing Oil Field, play a big part in the development of both hardware and software.

Much of the production work at the Shanghai factory is carried out by hand. The senior managers frankly admit that they are many years behind the West in computer design and in manufacturing techniques.

The quality of the integrated circuits appears to be patchy and the engineers are eager to move to large-scale integration as developed in the U.S. and Japan.

Familiar

None of the managers to whom we spoke had visited computer companies outside China, but they received the technical magazines and were familiar with what was going on. A few foreign-built computers have been imported in recent years (mainly from Japan), and the Chinese engineers are learning what they can from them. But this is not a substitute for the direct foreign collaboration which the Shanghai managers now recognise is essential. Some discussions with potential partners have already taken place.

It was a similar story at the Shanghai Turbine plant. Built in the 1950s with Czech technical assistance, this factory is now making 50 MW, 125 MW and 300 MW sets. The senior managers admit that

there are still some design problems with these machines; the period between major overhauls, for example, is much shorter with the imported turbine generator sets than with the Chinese machines. The plan is to move towards 600 MW sets during the next five years, and a large new factory is under construction for this purpose.

But it is accepted that for the move into the 600 MW era some foreign collaboration is essential. Preliminary talks have been held with General Electric of the U.S. and with the French.

The need for foreign technology is clear, but how much of it will be bought, in which sectors and in what form—these matters are still under discussion. Certainly the Chinese are not going to make themselves as dependent on outside technological help as they did during the 1950s, when the Soviet Union provided assistance on a massive scale. China will use foreign technology only when it is necessary to do so. Foreign companies will not be allowed to exercise direct influence over any significant part of the economy. Their participation will normally be that of advisers, although the distinction between technical advice and management control may be blurred in some cases.

Since the withdrawal of the Soviet technicians in 1960 China's attitude towards foreign technology has fluctuated according to the prevailing ideological climate. The use of foreign technology has been one of the issues in the apparently unending "struggle between two lines," "red" against "experts," "radicals" against "pragmatists," ideological purity against industrial and managerial efficiency. In the early 1960s after the failure of the Great Leap Forward, there was a big increase in purchases of foreign plant and technology—and again in 1972-75 after the Cultural Revolution. With the rise of the so-called Gang of Four, the emphasis switched to home-grown technology and hostility to all things foreign.

The present regime is trying to formulate a realistic approach to foreign technology which does not conflict too violently with Maoist ideas. "Self-reliance is the main principle," Vice-Premier Gu Mu told us. "The importation of advanced technology and equipment should be regarded as auxiliary. We can solve most of our problems by relying on the initiative and effort of our workers." China's ability to absorb foreign technology is limited by the lack of a design tradition and by the shortage of qualified designers, made worse by the disruption of the education system between 1966 and 1976.

"What the Chinese lack," writes Hans Heymann, "as American observer, is not the ability to manufacture. They manage quite well with custom building, hand-machining, and small-scale batch production. What they have not mastered are the techniques of modern continuous-flow production processes, precise automation, technology, and other organisational aspects of management."

In this context, the importation of complete plants, particularly for petrochemicals, fertiliser, and synthetic fibres, should have an important economic effect.

Although the construction of some of these plants has been delayed enough for them to be in operation, to

show that the Chinese are able of running complex advanced-technology projects. But the danger is that these plants, most of which were built on green-field sites (sometimes in remote areas), will become islands of modernity without much spin-off effect on the rest of industry. Virtually all the hardware for the Kelllogg ammonia and urea plants, for example, was imported; the Chinese appear to be cautious about using indigenous equipment in these projects, presumably for fear of causing technical problems which will delay their completion.

If the Chinese are to modernise their industrial base without excessive dependence on overseas companies, they will need to use foreign collaboration in a variety of different ways. For example,

the manufacture of petrol engines is spread over a number of plants and model with outdated designs and poor economies of scale both in engine assembly and in component production. The modernisation of the farm machinery industry is a high priority and there is an urgent need for more efficient diesel engines.

The British engineering consultants, Ricardo, are advising the Chinese on specific design and on overall engine policy. China is also likely to seek assistance from foreign engine component manufacturers. This may involve licence deals, the purchase of equipment and complete plants, and possibly joint ventures, particularly if the permit imported technology to be paid for by experts.

In some respects the agreement with Rolls-Royce on the Spey engine is a model which the Chinese may seek to use in other sectors—establishing a partnership with a foreign company which is an acknowledged leader in its field, drawing on its technology and advice to update existing designs and manufacturing facilities. For the foreign company the drawback to this arrangement is that it is usually more interested in selling hardware than in transferring technology... For the Chinese the problem is the lack of qualified engineers capable of absorbing the new technology. Training

In this context, the importation of complete plants, particularly for petrochemicals, fertiliser, and synthetic fibres, should have an important economic effect. Although the construction of some of these plants has been delayed enough for them to be in operation, to show that the Chinese are capable of increasing by as much as 5 per cent through a clearer and more rational allocation of responsibilities. An Association Enterprise Management was set up in Peking earlier this year to study management systems and experience in China and abroad. How far these developments will enhance the status of the professional manager remains to be seen. Most of the managers whom we spoke were hopeful.

Illustrating

It was, of course, frustrating for the managers at the Shousteelworks in Peking not to be able to buy even minor items of capital equipment without the lengthy process of filling in forms and arguing their case with officials at the Ministry. It was frustrating to be earning foreign exchange through exports, but not be able to use a cent of it to buy imported equipment, even though the would cost very little but would have a useful impact on production efficiency.

It was frustrating, too, not to have direct dealings with the plant's foreign customers and discuss market conditions with them, so that they could see the strength of the competition and have a better appreciation of market needs.

It is often said that the modernisation of Chinese industry is primarily a matter of management. But this is not just a question of acquiring specific skills from overseas. It involves giving the managers individual enterprises the status, authority and incentive to take independent decisions.

MANAGEMENT

CHINESE MANAGERS, like university professors and others holding senior positions, suffered badly during the period of the Cultural Revolution and the Gang of Four. They were largely deprived of their authority and in some cases relegated to the shop floor. Power was in the hands of Revolutionary Committees which were more interested in ideological purity than in running an efficient enterprise. Since the fall of the Gang the role of the manager has been re-established. Senior executives, though still contending with great obstacles and frustrated because of them, have recovered some of their self-confidence as well as their authority. Most of the managers to whom we spoke during our visit showed as much enthusiasm and determination to improve the profits, productivity and quality as their Western counterparts. The question is whether the Chinese system will allow them to do so.

In most enterprises the dual structure which prevailed before the Cultural Revolution has been restored. On one side is the factory's Communist Party committee, whose secretary is regarded as the most important man in the plant. The Party secretary is responsible for representing the Party's policies and objectives to the enterprise and for ensuring that they are understood at all levels and carried out. He is sometimes said to be responsible for political education, but at the same time he participates in major investment and technical decisions.

All important decisions—for instance on the figures to be included in the annual plan, proposals for the purchase of

new capital equipment, the installation of a new incentive scheme—have to be approved by the Party committee, which meets at least once a month. The director of the enterprise, who will normally be a member of the Party committee and is sometimes its deputy secretary, is responsible for the day-to-day operation of the plant. He and his deputies will meet at least once a week to review the progress of the factory. His deputies may be in charge of particular manufacturing departments or have functional responsibilities for production, quality control, finance, personnel and so on.

The relationship between the Party secretary and the director is clearly crucial. In some respects their roles appear to be not unlike that of the chairman and managing director in a conventional UK board of directors. One of the tasks of the Party secretary is to look after liaison with external bodies—for example, with the various planning authorities with which the enterprise has to negotiate. (In the Anshan steelworks the Party secretary is also a vice-minister in the Ministry of Metallurgical Industry.)

Managers will say "we practise collective leadership," and the extent of the director's discretion must vary from enterprise to enterprise. In the Shanghai Leather Shoe factory, which has about 900 employees, the nine-member Party committee considers the big issues like the appointment of department heads and next year's production plan. The Party secretary, apart from his activities outside the company, spends a good part of the day talking to workers at different levels, listening to their suggestions and complaints and generally concerning himself with the

welfare and morale of the staff. He is in regular contact with the director (one has an upstairs office, the other downstairs), but does not interfere in day-to-day management.

The Party committee contains some shopfloor workers, but the workers' congress is said to be the main link through which the management of the enterprise. Some sort of balance appears to be struck between the Party committee and the workers' congress. "If we relied too much on the Party committee, we were told at the Shanghai Turbine plant, 'the initiative of the broad mass of workers would not be brought into play. If we relied too much on the workers' congress, there would be a danger of anarchy.'

A recent article in the Workers' Daily called for more enterprises to establish workers' congresses. "The leadership of the enterprise must inform the workers' congresses about the finances and planning of the enterprise as well as about armaments and problems, and should ask them for criticism and suggestions." The article notes that in some enterprises workshop directors, section chiefs and group leaders have been elected by the workers and this has brought about closer relations between enterprise management and workers. There have been recommendations that direct election by workers should be applied to the senior directors, but this had not happened in any of the enterprises we visited.

Foreign companies operating in China argue that the Chinese management system leads to a confusion of responsibilities and a lack of a clear chain of command. "There is too much scope for group discussion and not enough direction by senior managers." The Chinese authorities appear to accept this criticism. In line with the more

ENERGY

Kingpin of future power plans

COAL

COAL WAS king in China last year. Xiao Jian, the Minister for Coal, announced plans for the doubling of output by 1987 to 1bn tonnes a year. Orders for mining equipment amounted to \$1bn. A \$40m protocol was signed with Germany for building and equipping five new deep mines and two open-cast mines. Britain was also led to believe that the Chinese had in store for it orders worth several hundred million dollars to develop new mines.

All this was a much-needed recognition that without major new investment in coal, China would not be able to solve its problems of power shortage. But as well, China's ambitions were matched only by those of the Soviet Union and the U.S. Between 1980 and 1975, however, output grew at less than 3 per cent a year—a pace woefully inadequate for China's rate of industrial growth even though smaller budgets for coal were offset by higher investment in oil. Output picked up in the early 1970s when renewed emphasis on coal was also reflected in the purchase of \$100m in \$200m of foreign mining equipment in 1973-74. But the industry was badly hit by strikes and slowdowns during the political chaos of 1976 and also suffered a major loss of output the same year as a result of the Tangshan earthquake.

Production climbed by 12 per cent both in 1977 and last year to 615m tonnes but now seems to have peaked. The extensive half-yearly production figures for January-June 1978 released by the authorities surprisingly did not include coal—an omission that suggests a poor performance. The annual plan for

in nicely with Chairman Hua's visit to Europe. But even then it is more likely that the Chinese will set in motion a round of new negotiations rather than enter into major new contracts.

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the year foreshadowed only a 3.5 per cent increase in output, the muddle they were in. The Coal Ministry certainly got carried away by its own enthusiasm, as reflected in the number of delegations it sent abroad and received and the number of protocol agreements it signed for vast mining projects.

On the other hand it skillfully exploited the enthusiasm aroused abroad to enlist the help of Western and Japanese companies to demonstrate equipment and provide consultancy services for which it normally would have had to pay. Comparing notes after the slow-down had become clear, British, German and Japanese companies often found that the Chinese had proposed to them the same mining project and that they were effectively being asked to pass judgment on each other's schemes.

In Britain's case enthusiasm was aroused during the visit to Peking of the industrial delegation led by Mr. Edmund Dell, then Secretary of State for Trade, in August last year. The Chinese indicated that they wanted Britain to design, construct and equip two large mines of 5m tonnes each at Datong in northern China. In discussions they also implied that they were interested in British participation in the development of several other large mines which would have involved equipment orders running into hundreds of millions of pounds.

As delegations passed to and fro between London and Peking, they also added a coal analysis laboratory in Shanxi province, a testing laboratory for equipment and consultancy over methane drainage. In November the National Coal Board signed a memorandum of understanding with the Chinese for pre-planning and feasibility study at Datong, which would have been carried out by PD-NCB, the Board's consultancy division jointly owned with Powell Duffryn, and which also split out China's interest in securing British involvement in other projects.

Before the visit of Mr. Varley, the then Secretary of State for Industry, to Peking in February, the Chinese began to shift their ground by adding demands that purchases of equipment should be paid for in part by coal to be shipped to Britain. In the spring, after the NCB had done a great deal of preparatory work, the Chinese announced that they could not receive a further negotiating delegation from the NCB until the revision of the national plan had been completed. Indications now are that the Chinese are likely to set a date for the

resumption of talks in themselves and by making use of Chinese manufactured mining equipment.

The Germans had a similar experience and one that followed longer negotiations. The proposal would have involved German participation in adding 62m tonnes of capacity through five deep mines and two opencast lignite mines in Hubei and Anhui province. Among the German groups involved were Krupp, Orenstein and Koppel, Demag and Thyssen Industrie-Bergbau-technik.

Little has emerged as yet of China's revised long-term planning for the coal industry. The focus will almost certainly remain the opening up of new mines and the enlargement and mechanisation of existing major coalfields. No substantial new coalfields have been initiated since the early 1960s.

But the Chinese want to review the siting of their new mines so as to tie some to new mine-mouth thermal power stations and others to the expansion of their rail network. They are anxious to minimise their foreign exchange expenditures by doing as much as possible of the planning work

exports of coal to a third wall—techniques, reflecting Britain's early influence on the development of the industry.

Coal has accounted for a diminishing proportion of China's energy consumption, dropping from 97 per cent in 1962 to 68 per cent in 1977. Increased demand will result from both the switch to coal-fired power stations and the growing needs of industrial consumers such as the iron and non-ferrous metal industries.

A major problem is to increase the supply of high-grade coking coal as China's coking coal deposits are of poor quality.

About half of China's coal output comes from the north and the north east, with Shanxi province alone accounting for 70 per cent of the nation's reserves.

Coal resources in the west and south have not been extensively developed. A third of output is still produced by small, often uneconomic and inefficient mines that are a legacy of the Great Leap Forward.

It is these that the Government would like to phase out but it faces major difficulties over the resulting loss of jobs and the inadequacy of the transport system to ferry coal to rural or isolated areas.

D.H.

Blackouts a regular order of the day

ELECTRICITY

IN PEKING blackouts are common occurrences in parts of the city and some factories have to work alternate days. Outside Shanghai, the steam turbine factory—one of the biggest power equipment manufacturers in the country—is forced to operate three shifts in a day, in Wuhan the giant new steel complex is virtually idle.

Throughout China a visitor gets continuing first hand evidence of the seriousness of the country's power shortage. An official from the Ministry of Electricity in Peking says that industry as a whole has a 15 per cent shortfall of its requirements. The well informed Hong Kong journal Cheng Ming puts the figure at 20 per cent. Continuing references in Ministerial speeches to power as "the weak link" in the economy underline its importance as a constraint on economic growth.

Vice Premier Yu Qijun, outlining the national economic plan for 1979 to the recent National People's Congress, said that steel production was being held down to enable more power to be diverted to light industry. He warned that fuel and power supplies would remain tight "for a fairly long period." Power output is scheduled to grow this year at 7.2 per cent or below the planned 8 per cent growth in industrial output.

Network

Peking is aware that there is no short cut to getting any substantial increase in power generation. New coal mines need to be developed and the rail network that handles the bulk of coal traffic vastly improved. Hydroelectric plants take years to build and will require enormous investment in transmission lines. The domestic power equipment industry is some 15-20 years behind the west in its technology. Imports of power plants from the west and Japan, which increased sharply in the early 1970s, fell off in 1976 and 1977 and are still running well behind what is needed to prevent power shortages from further restraining industrial growth.

Indicative of some of the difficulties that have to be faced are the problems of the Steam Turbine factory at Shanghai. Acclaimed last year as one of the "Daigins" of Shanghai—at a time when "Learning from Daqing" was still in fashion—it is a seemingly well run enterprise with a workforce of 8,000 that produces mainly 50 MW and 125 MW turbine-generator sets as well as one or two 300 MW sets a year. The 125 MW sets are serially produced in China and are the backbone of most large, Chinese equipped power stations. Only a few Chinese made 300 MW units are in use.

Production at the plant reached a peak of 1,700 MW in 1973, and the target for this year is only 1,500 MW. The numerous machine tools undergoing repair or alteration bear out the director's claim that priority is now being given to improving quality rather than increasing volume. Quality was poor in 1973, he adds.

The high pressure 125 MW set was designed at the plant, he says, on the basis of the same Czech technology used to manufacture medium pressure 25 and 50 MW sets in the 1950s. The result was that the factory ran into problems of turbine blades breaking, excessive vibrations and low fuel effi-

cency. Some of these difficulties have still not been removed. He says that the design of the 300 MW set was also based on upgrading Czech technology. But it seems clear that difficulties with this have now been held up by the revisions of the long-term plan. GEC and Northern Engineering Industries (NEI) have submitted proposals for separate stations—one that would have originally comprised two units of 350 MW near Peking and the other of two units of 660 MW at Hushan in east central China. The Chinese have since raised doubts over the sites and the type of coal to be used, but the prospects that the projects will eventually go ahead still look hopeful.

Shelved

What does seem to have been shelved for the immediate future are any plans for nuclear power stations.

The official press has of late spoken of speeding up both hydro- and coal-fired power stations. China has the largest potential of hydroelectric power in the world, and hydroelectric plant currently accounts for about 28 per cent of installed capacity. The snag is that most of it is located in the west and thus would require an extensive transmission network to carry it to the population centres. There are only three large grid systems in China, and China's technological capability in manufacturing transformers and switchgear is probably behind the rest of its power equipment industry.

Among schemes picked out for

more rapid development are the Longyangxia hydropower station on the Yellow River, Baishan hydropower in the north-east, Dehua hydropower in Guizhou Zhuang autonomous province, Daqing power station in Yunnan, Daqing thermal plant in north China and Yuanbaoshan power plant in Liaoning.

Mr. William Clarke, the U.S. expert on China's power industry, has estimated that to support an industrial growth rate of 10 per cent China would have to have added last year 3,800 MW of installed capacity. In fact, the Chinese claim to have added 5,000 MW though industrial growth increased by over 13 per cent. In the short run there are probably plenty of ways that China can make more efficient use of its existing generating capacity and also conserve power. But in the long run China is unlikely to be an exception to the rule that has been found: the case in most rapidly industrialising countries—which is that the rate of growth of electric power needs to be a few points ahead of the rates of industrial growth if industry is not to be held back by shortages.

In the 1971-75 period generating capacity expanded at an annual rate of 11 per cent. There is no reason why this cannot be repeated. But there is now a substantial backlog of power equipment to be made good. At the same time the delays over ordering new equipment from abroad in the last two years are likely to exacerbate this in the immediate future.

D.H.

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TRADE

CHINA XIV

A readjustment of policy

CHINA'S TRADE is one sector of the economy which so far shows no signs of the effects of the "readjustment" policy introduced last February. Total of the economy which so far came to \$12.4bn (converted at \$1 = yuan 1.72), over 40 per cent up on the corresponding period last year and well on the way to reaching the planned figure for the year of \$27bn.

Last year's total was \$20.6bn, over 30 per cent up on 1977, as much as the overall percentage increase expected this year. The target for imports for 1979 is 32 per cent and for exports 15 per cent, which both seem almost certain to be reached.

Peking will clearly have a deficit on trade this year as it did in 1978. Last year, however, the overall balance of payments (which includes invisibles like tourism and, most valuable of all, remittances from expatriate Chinese to their families in China) was favourable. With the gap between exports and imports growing bigger all the time, this seems unlikely this year, but Peking will probably find this out of its commercial borrowing.

After many months of speculation, Peking has this year concluded approximately \$26bn in foreign credits, of which about \$3bn is in commercial loans from Western banks. The total includes about \$10bn from Japan, of which \$2bn was a commercial loan thought to have been used to finance Japanese plant purchases. So far, it is believed, there has been no drawing on the other credits.

In contrast to last year, when the Chinese almost signed more contracts than they could actually afford, a much more carefully planned trade programme is now under way. The "re-adjustment" not only called for reductions in capital construction at home but froze all the negotiations the Chinese were involved in abroad. Since then the credit agreements have enabled the Chinese to go ahead with the purchases from Japan, and the continuing travels of Chinese delegations to Europe suggest that in due course at least some of the schemes previously under discussion will go ahead.

But while the foreign exchange shortage was the

MAIN TRADING PARTNERS 1978

	(Sm)	Exports to	Imports from	Total
China	3,049	2,030	5,079	
Japan	995	367	1,362	
W. Germany	824	324	1,148	
U.S.	456	129	585	
Australia (11 mos)	255	271	526	
USSR	442	83	525	
Canada	197	227	424	
France	188	199	387	
Italy	175	212	387	
Britain	132	125	257	
Netherlands				

immediate reason for the freeze, there were other and more profound reasons, such as China's inadequate infrastructure and its lack of technicians. These will take much longer to solve than the money problem, and it may be that countries other than Japan will have to wait some time.

Escalating

The rapidly escalating trade figures of this year are the outcome of orders placed last year, and though no breakdowns of statistics are yet available, it seems likely that the flow of Japanese and West German steel and equipment, plus the substantial orders for grain have helped to swell the total. For mining equipment alone the Chinese last year placed orders worth \$1bn, \$500m from West Germany and \$200m from Britain.

Last year the Chinese were discussing with Western companies purchases of power equipment, steel plant, railway equipment, non-ferrous metals, mining plant, aircraft, chemical plant and vehicle production lines. Almost all the Western countries were involved, including the U.S., although it then lacked diplomatic relations. Some large contracts have been signed with Japan and Germany the main beneficiaries, but many others have been deferred.

"Readjustment" meant a reversal of trade priorities. Alarmed by the costs of investment in heavy industry and the long period needed to bring new equipment into production, the Chinese announced a new policy of agriculture first, but closely allied to light industry development since much of the

as for as imports are concerned, the Chinese problem will be to hold them down. They are unlikely to be able to afford to allow them to continue at this year's rate of growth of 32 per cent. Grain imports are already at an all-time high at a reported 12m tonnes. Yu Quill, the Planning Minister, said in his National People's Congress

report in June that imports of technology and equipment would this year be 220 per cent up on last year and would cost nearly \$3bn. Such a rate of increase will manifestly have to be slowed.

This the Chinese evidently plan to achieve by spacing out their requirements over the next few years, cutting out some of their projected steel industry development. It seems unlikely that the pattern of imports will change much from recent years, the last year for which a breakdown is available (1977) shows foodstuffs (mostly grain and sugar) at 17 per cent, industrial supplies (chiefly steel at 22 per cent) at 65 per cent, and capital goods 18 per cent.

raw materials for it comes from agriculture. Light industry argued the Chinese, is quick and cheap to set up, provides consumer goods for the home market and exports to earn foreign exchange.

Thus they are now focusing on stepping up light industry exports and importing light industry equipment. This they plan to do either through joint ventures or compensation trading, both of which mean considerable saving of foreign exchange. However, compensation trade has not proved attractive to potential suppliers of heavy industrial equipment.

The Chinese themselves are uncertain about how quickly trade can be increased, especially though it is for China's modernisation. It seems unlikely that this year's rise could be anything like maintained, though some officials talk about a 20 per cent growth (10 per cent in real terms) over the next few years. Researchers in the U.S. Commerce Department have suggested a possible average growth of 20 per cent for imports and 12.5 per cent for exports up to 1983, with a debt for that year's end of \$26bn, which would fit with what the Chinese have actually acquired in credits. This scenario also postulates a 10 per cent growth in invisibles, rising through 15 per cent in 1981-82 to 20 per cent for 1983-85.

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changes will mean the Chinese can sell more. Japan is already well ahead of the field because of its proximity and special links, but the Chinese will certainly spread purchases around for strategic reasons. Of the European countries, West Germany seems likely to maintain its huge lead over France, Britain and Italy.

Most growth seems likely to occur in trade with the U.S., where the Chinese have barely started to buy industrial equipment, and where possible tariff

changes will mean the Chinese can sell more. Japan is already well ahead of the field because of its proximity and special links, but the Chinese will certainly spread purchases around for strategic reasons. Of the European countries, West Germany seems likely to maintain its huge lead over France, Britain and Italy.

When the next round of Chinese buying begins, the picture may change somewhat as Peking has invited tenders for the same plants from different companies and countries and there is no indication yet as to which is favoured. As the financing is becoming increasingly complex, the Chinese finding it more and more difficult to compare prices. One factor that should not be forgotten is the role of the Soviet Union, last year well up in the table of trade partners. It could well resume playing a part in China's industrialisation since it does not need to be paid in hard currency.

C.M.

Time to draw breath

TRADE WITH JAPAN

JAPAN'S TRADE with China has been growing extremely fast since the beginning of last year when the two countries signed a long-term trade agreement calling for the exchange of \$20bn worth of goods up to 1983. Expansion, however, has not been free from problems: indeed there are now considerable doubts about the prospects for the further growth of two-way trade (in 1980 and beyond). The stimulus to Japan's exports to China in 1978 was pro-

vided by the start of China's economic modernisation programme which led to a sharp increase in purchases of Japanese machinery and capital equipment (up almost 200 per cent over the 1977 figure). The framework for trade expansion was provided, in large part, by the two-way trade agreement (signed in February 1976) which called for an equal exchange over eight years of Chinese oil and coal for Japanese industrial plant and construction machinery.

The agreement was the first in the history of Sino-Japanese trade relations to commit Japan to long-term targets for the purchase of Chinese oil and coal (previously purchasing had been done on an annual or semi-annual basis). It was decided in March 1979 to extend the agreement up to 1990 (from the original 1983 terminal date) and to expand the value of goods to be exchanged from \$20bn to between \$40bn and \$60bn. Details of this extension still have to be settled, however, and may remain undecided for some time to come. Both the 1978 and the 1979 version of the agreement exclude the more traditional items of Sino-Japanese trade including steel and fertilisers (from Japan) and agricultural products.

Contracts

Following the signature of the agreement in February 1978, China began to place a series of plant contracts with Japanese suppliers, starting (in May) with the signature of the \$2bn contract for the Baoshan integrated steel plant (for which the main contractor is Nippon Steel Corporation). The Baoshan contract was followed by 23 other plant contracts ranging in value from \$200m downwards. The total value of contracts won by Japan during the year was over \$2.6bn, with payment to be made for the most part in cash, since China and Japan were unable to agree on the currencies or interest rates to be used in deferred payment financing.

The flood of Chinese plant contracts diminished sharply at the start of 1979 and in February the Japanese exporters received their first major shock since the signing of the long-term trade agreement one year earlier.

Companies involved in 1978 (including that for the Baoshan steel plant) received telegrams from the Chinese state trade corporation which had ordered the plant informing them that import licences were not being granted by China's Ministry of Foreign Trade and that, therefore, the implementation of the contracts was being suspended.

The Chinese telegrams alluded to delays in the completion of negotiations on various loan proposals made by Japanese banks to China as one of the main reasons for the withholding of export licences. These proposals included an offer by 22 Japanese foreign exchange banks of a \$2bn syndicated loan at an interest rate of 0.75 per cent over LIBOR (deemed unacceptable by the Chinese, who were demanding 0.25 per cent).

The suspension of some \$2.6bn worth of 1978 plant contracts (coupled with rumours that the contracts might be canceled altogether) caused something approaching panic among Japanese plant exporters and trading companies (for whom the Chinese orders represented by far the largest chunk of overseas business they had secured during 1978). It also had the effect of putting heavy pressure on the cautious Japanese banking community to compromise with China over the terms of its proposed \$2bn syndicated loan.

After learning (in April) that a number of British banks had initiated five-year loan agreements with China in which the interest rate was set at 0.5 per

CHINA-JAPAN TRADE

	Chinese exports	Chinese imports
1975	1,551	2,559
1976	1,571	1,653
1977	1,547	1,593
1978	2,100	3,019
(January-June)	1,236	2,053

THE LONG-TERM TRADE AGREEMENT
February 1978 version
Period 1978-85
Value \$20bn in two way trade
Items China to export coal and oil
Japan to export plant, technology, construction materials

CHINESE EXPORTS (in tons)
Oil
1973 7.0
1974 7.8
1975 8.0
1976 9.5
1977 15.0
1978 15.5
(Post-1982 volumes to be decided by the end of 1983.)

Companies were studying the Chinese law intensively in July and early August, but initial reactions to it were not especially favourable. It was noted in Tokyo that the law left a notable number of questions unanswered about the terms on which foreign companies would actually operate (patent and taxation) and agricultural products.

After the issue of letters of intent by the Japanese banks guaranteeing long and short-term loans to China, the majority of the companies which signed plant contracts during 1978 were notified that their contracts had been "reinstated" on the original cash payment basis and without any change in the price or terms of the original contract. This news came as a relief to most companies, despite the fact that the four-month delay caused by the suspension announced in February had involved the Japanese exporters in heavy extra costs due in part to the impact of inflation on original cost estimates and partly to the fact that work in progress had been halted while the future of the contracts was in doubt.

Two contracts which were not reinstated by the Chinese on the original terms were the Baoshan steel contract and a Y15bn petrochemical plant contract signed by Toyo Engineering Company and Mitsu Bussan.

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After tying up the loose ends left over from its 1978 plant purchasing spree, China signed three more plant contracts with Japanese companies in late June and July 1979. The three contracts were: a Y3bn cashmere processing plant to be supplied by Unitika and Mitsui Bussan, a 1,500t special film plant from Chugai Boeki and a black-and-white TV tube plant to be supplied by Matsushita (for which no price has been published although the capacity is set at 1.6m tubes per year).

There then appeared to be something of a lull as China published its law providing for the establishment of foreign joint ventures and awaited the Japanese (and other overseas) reactions.

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Represent

A taxing overhaul for company cars

BY DAVID WAINMAN

THE "PERKS" of a company car and free petrol on the company are under question by the Inland Revenue. Question is, in the narrow sense, a more accurate word than challenge: the Revenue has merely issued a discussion paper, asking for taxpayers' comments. But it is clear that change is on the way.

There are five areas in which comments are requested:

- Whether, and when, the scale rates could be adjusted to more realistic levels. These scales quantify the amount upon which the annual proportion of company directors' and the higher paid are taxed in respect of the benefit described as the availability of a car for private use. And the Revenue indicates that the way in which the scales differentiate small cars from the more expensive ones is also under examination;

Onus on the employer

- Whether other changes should follow: for instance, could there be changes and simplifications in the present special rules for those whose business use of their cars is only very small, and also for those who drive more than 25,000 miles per annum on business?

- Should all of these changes apply also to taxpayers earning less than £8,500 per annum as well as to directors and the higher paid? Broadly speaking, benefits not capable of being turned into cash have always escaped tax in the hands of those earning less than the threshold figure at which this part of the tax legislation begins to bite;

- Whether tax should be paid under PAYE, weekly or monthly, on whatever figure is determined to be the benefit—and here it is suggested that instead

of the Revenue achieving this by building some estimated figure into the employee's "coding" at the beginning of the year, the onus should be put on to the employer to deduct tax by reference to the actual benefit received by each employee during the week or month concerned, taking into account any change in the car available to him, or in his use of it;

• How petrol could better be taxed. The Revenue acknowledges that the present state of the law is uncertain, even though it may have its own views of the effectiveness of arrangements involving company pumps, accounts with garages, credit cards and other similar schemes. It indicates that it would be a prerequisite of any new arrangement devised that there should be a further tax charge where the employee received without cost not only the car, available for private use, but also the petrol so consumed.

All of these questions arise from the Government's objective, stated in the Finance Bill debates, to discourage further growth in fringe benefits and it is possible to bring about a contraction. Company cars available for private use as well as for business journeys, have undoubtedly been the form of perk in which there has been the largest growth over the past three years. And that growth is very clearly visible to everyone who uses the roads at week ends as well as during weekday rush-hours. It is also only too obvious in the petrol consumption statistics: the Revenue's discussion document makes it clear that it cannot countenance a system which undermines Government policies on saving energy by allowing some taxpayers their private motoring without the real costs hitting their pockets.

Revenue guess on benefit

A computation was therefore required from every user of a company car every year. It was impossible in advance of this for the Revenue to do more than guess the level of benefit. And it was clear also that the Revenue thought that the figures, when it obtained them, were no more satisfactory as a basis of taxation than its initial guesses. It depended upon the taxpayers' accuracy in reporting private mileage, an area in which amnesia often seemed to be thought acceptable by those tax payers. There was one reported case of an individual being jailed for misstating the private usage of his car, but the Revenue was unhappy about its ability to enforce the law. And taxpayers generally thought both the law itself, and the Revenue's operation of it, disreputable.

In 1976 Mr. Joel Barnett, then Chief Secretary of the

Letters to the Editor

New Tap Stock

From Mr. A. Hughes

Sir.—We were told, at the time of the June budget, that the accompanying rise of 2 per cent in minimum lending rate to 14 per cent was, hopefully, to be short-lived. This hope seemed to be reinforced a little later when the Government was leaning on the building societies to persuade them to defer their necessary increases in mortgage rates until January 1, again indicating that this was MLR might well be reduced this increase might not be necessary.

I am accordingly surprised, therefore, at the issue (August 15) of the Tap Stock of £100 pt 12 per cent. The previous Tap of £150m was suddenly sold out last week, so that the Government coffers were awash, or would shortly be so, with enough money to cover the borrowing requirement for at least a few weeks. If so, why this rush to borrow more money now?

Of course, if someone in Government circles fears or knows that MLR, far from going down, may have to increase further, that would explain any anxiety to borrow more now, before rates rise. Putting that unworthy thought aside, however, I must ask why the Government broker did not elect to wait a short while for the expected fall in MLR to materialise, thus enabling him to turn saving me, and other happy taxpayers, a considerable amount of future interest.

Alan P. Hughes

136 Northgate Avenue,

Croydon, Surrey

Obtaining power

From Mr. E. Footitt

Sir.—When I was at Cambridge in the very early 1930s I read history and recall attending lectures on a subject known as "Political science."

One of the examples discussed by the lecturer was the newly created constitution of Italy by means of which Mussolini obtained and retained power. My recollection is that the peculiarity of that constitution, to which students' attention was drawn, was the election of the Government by the Party.

I have been waiting for some student of political science to write authoritatively in the Press comparing or contrasting (as the case may be) Mr. Bain's recent suggested constitutional proposals with the constitution of Italy in pre-Second War days and speculating on the consequences likely to flow from such proposals if adopted.

E. H. Footitt,

23 Bayley Lane,

Corby.

The Labour Party

From Mr. V. Finlayson

Sir.—Further to your recent excellent editorial on the necessity for a thriving Labour Party, you comment further on Labour Party democracy on August 15.

As much as many members of the Tribune Group support Jim Callaghan, the issue is not one of so-called Left-Right

Problems for steel

From the Managing Director

Five Tubs

SIR.—I have read with particular interest your authoritative series of articles on the problems facing the steel industry in this country and overseas.

It appears that British Steel Corporation is seeking to concentrate production of tonnage steels at a few large integrated steelworks to be operated on significantly reduced manning levels, while elsewhere it moves to a product mix with higher added-value and thus a greater potential for profitability. Because of the particular

problems in carrying through a rationalisation and manpower-reduction programme in Britain it seems probable that BSC will require a substantially longer time to achieve its first objective than its European competitors; the tonnage steel industries of North America, Japan, and the developing countries are already operating at or below the manning levels which are presently no more than a distant goal for BSC.

Nor is this the full extent of BSC's problems. The rate of technological development in the international steel industry is such that the emerging "third-world" steelmakers, who in the last decade have largely rendered obsolete the European tonnage steel industry, are today commissioning the plants and acquiring the skills to produce the higher-added-value products on which BSC's future strategy depends.

There is disturbing evidence to support this view in your recent report that a single shipment of stainless steel bars from Brazil represented some 20 per cent of British annual consumption and was being supplied at prices reportedly 40 per cent below those current in this country.

BSC's strategy is undoubtedly correct but to be successful it needs to be implemented now and not at some unspecified time in the future. Time, tide, and foreign steelmakers wait for no man.

T. M. Barclay,
Five Tubs,
Engineering Works, Crownhill,
Plymouth.

Mind-boggling satellites

From Mr. P. McClory

SIR.—I was very surprised to read a report (August 9) giving brief details of a Government study into solar-power satellites as a long term solution to our energy problems.

Even if Britain was a strong supporter of the European Space Agency such an idea would be amusing. As it is demonstrably not interested in the possibilities of even near-space projects in space engineering the suggestion, on the face of it, looks desirous.

To get some idea of the sheer magnitude of such a project—and the costs and engineering problems involved—the following projections by the National Aeronautical and Space Administration should be considered. The principle behind these solar satellites is that they would be placed in geosynchronous orbit (stationary 22,500 miles above the earth). There they would be in almost continuous sunlight. Solar cells would convert the light from the sun to electricity and this would be beamed to earth in the form of microwaves. Ground stations would convert these back to electricity and feed this into the grid.

Each solar satellite would be of mind-boggling proportions.

Almost the size of Manhattan Island, they would be about 12 miles long and 3 miles wide.

Each structure would contain around 36 sq. miles of solar cells but generate only 10MW of electricity (half the output of the smallest nuclear power station). NASA estimates that a construction team of 550 people would be needed working in deep space to build just one satellite. With such formidable statistics it will not come as a great surprise to learn that projected costs for such venture are somewhat high. At present day prices the 100,000 tons of materials needed to be lifted 22,000 miles into space would cost about £25 a pound. A simple calculation shows that a typical solar-power satellite would cost in the region of £55bn! However, some U.S. reports consider this figure far too high and feel it could be reduced to around only £7bn. This happens to be near the total earnings of the UK from North Sea oil this year including the recent Organisation of Petroleum Exporting Countries' rise).

You also mention that this study suggests that many departments of Government, Energy, Industry and Trade, Home Office, Health, Defence, Agriculture, Environment and the Foreign Office will be involved if such a venture is ever undertaken. In view of the level of expenditure anticipated, why have the authors of the study apparently excluded HM Treasury from their deliberations? Could it be that this department is staffed by realists.

Surely if this country had a

series intention of joining a

possible solar satellite project,

some basic and obvious steps

would be taken now.

For instance the solar cells that

turn sunlight into electricity are

primarily made from silicon crystals.

It is very expensive to

grow these crystals on earth

because an artificial vacuum is

needed.

For this reason one kilowatt of sun-powered electricity

costs about £10,000. But if silicon crystals are grown in the

permanent vacuum of space

their price could come down

dramatically. To test these and

other theories companies in Ger-

many and Japan have booked

space on the NASA "shuttles"

which start taking off next

spring. The plan is to start

silicon crystal growing "facto-

ries" in earth orbit by the mid-

1980s. Only one company in

Britain makes solar cells—Fer-

nand. Not only does it have no

plans to book experimental

space on the "shuttle" but the

silicon it uses in its solar cells

in Britain comes from a com-

pany in Germany.

One is left feeling somewhat

bewildered as to why the Depart-

ment of Industry had to com-

mission a "study" in the first place.

A few telephone calls were all

that was needed to establish that

Britain will never build one

solar-powered satellite, let alone

the dozens we would need to

make a significant contribution

to our future energy demands.

In any case it is unlikely that

even the Americans will build

one in the foreseeable future.

Congress would never pass the

£7bn needed to build just one

station. Not, that is, until every

building in the US is properly

insulated—surely a much better

investment for them, and for us.

Paul McClory,

The Natural Energy Centre,

2 York Street, WI.

TAX AND THE COMPANY CAR

Revenue recalculations based on AA figures for 1979 with running costs for 8,000 miles			
Present scale benefit	Revenue recalculations based on AA figures for 1979 with running costs for 8,000 miles	Present scale benefit	Revenue recalculations based on AA figures for 1979 with running costs for 8,000 miles
up to £2,000:		190	594
1,301-1,800 cc		250	695
Over 1,800 cc		380	1,044
Cars with an original market value over £8,000:		550	1,732
Costing between £8,000 and £12,000		880	2,417

For the great majority of cars, however, the 1976 legislation adopted a very different approach. Both annual value and running expenses were wrapped into a prescribed scale figure which was to be the sum upon which the employee was to be taxed—without regard to business or private mileage. The legislation made it clear that it was the availability of the car for private purposes which was to be taxed, not its actual use.

Joel Barnett
1976 revisions

Ingrained in the mind

But even here the concepts of business mileage were ingrained in the Revenue's thinking that it made an exemption for the employee who covered more than 25,000 miles per annum on business. He pays tax on only one half of the scale figure.

Where the Revenue is now admitting that a slip-up occurred was in the fixing of the scale rates.

The figures were based on estimates of one half of the standing charges

any event £2 per cent by the Revenue—but they have also been painfully aware over a number of years of the effects of pay restraint.

The Pay Board never fully accepted the Revenue's measurements of car benefits as appropriate for pay restraint purposes—but many employers took it to be so. And the growth in the numbers of company cars was accordingly unrestrained.

It was preferable, for those with low business mileage in particular, to have a company car rather than to use their own cars and claim a mileage allowance, until April 1978, to recognise inflation.

The view taken by many employers that the scales are a generous under-valuation is also significant. Employers know what is the true cost of providing a car at cost borne by the employer and not by the employee.

At the instance of the motor manufacturers all of the proposed scales were substantially cut back before the 1976 Finance Act was passed into law.

This has not been compensated since. The only change is a 10 per cent increase, in April 1978, to recognise inflation.

And will the Government review the perk which is so valuable that few people even recognise it as such? The deductibility of pension contributions, and their tax-free build up in the trustees'

UK COMPANY NEWS

Dunbee-Combex may hive off DIY side

Dunbee-Combex-Marx, the toy group whose profits fell sharply last year, is considering breaking off its in-house activities. An announcement is expected to be made at today's annual meeting. The company's DIY activities brought in trading profits of around £1m last year on sales of nearly £20m and their flotation would enable the group to raise necessary capital.

Mr. Richard Beecham, the joint managing director, declined to comment at the weekend, other than to say that "any statement we have to make will be made at the annual meeting."

On Friday, it was announced that Dunbee would be sending its shareholders a new set of 1978 accounts because errors had been found in the original version. These stemmed from the incorrect consolidation of subsidiaries, although net worth and the results are unaffected by the changes.

Dunbee's pre-tax profits slumped last year from £8.4m to £1.3m, with severe losses occurring overseas, chiefly in the U.S., but also in West Germany and Australia.

BOARD MEETINGS

The following companies have notified dates of Board meetings to the Stock Exchange of London:

TO-DAY

Intertel-Carrier, Saynes, Blagden and Hobbs; F. C. Boardman, Nelson.

FUTURE DATES

Internat.	Aug. 20
Eurospars Puf. Min.	Aug. 21
Holiday Inn	Aug. 22
Investment Trust of Guernsey	Aug. 22
Lambert Howes	Aug. 22
London Corporation	Aug. 22
Christie Brothers	Aug. 23
Lord Investors	Aug. 23
Saint Gobain	Aug. 22
Amendex	Aug. 22

Because of the rapid growth of its toy business, Dunbee has not pressed ahead with the expansion of its DIY and industrial division, for which prospects were described as "encouraging" in the annual report.

Early last year, it acquired the

Decco chain of DIY wholesale cash and carry centres, the largest in the country.

It is not thought that Dunbee intends to float off any of its other activities, and there are no plans to sell the Louis Marx operations in the U.S., despite the company's recent difficulties there.

— **TO-DAY**

Intertel-Carrier, Saynes, Blagden and Hobbs; F. C. Boardman, Nelson.

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Spillers has followed up its immediate rejection of last week's £5.3m bid from Delgety with a letter to shareholders in which they are "strongly advised" to take no action until they have had their directors' comments.

The letter again says that the Spillers Board feels the offer is "unlikely to be advantageous to the company, its shareholders or its employees."

Mr. Michael Vernon, the chairman, said the Board would present its opinions after the formal offer documents have been received.



Sir Lindsay Alexander, chairman of Ocean Transport and Trading, which is tomorrow due to announce interim results for 1978.

Airfix sees upturn

Airfix Industries has a satisfactory order book and those subsidiaries with production are improving their performances, says Mr. Ralph Ehrmann, the chairman, in his annual report. He adds that he believes the group is in a good position to deal with any problems, and should show considerable progress in the coming year. The chairman expects turnover to increase again, and he hopes margins will improve.

In the year to March 31, 1978, the company's taxable profits declined from £2.68m to £1.8m on sales ahead from £28.8m to £23.2m.

Mr. Ehrmann adds that two new export companies Crayonne in Frankfurt and Crayonne in Milan have been set up as part of their policy of product innovation and improving marketing efforts, especially overseas.

The loss at Meccano Ltd. year remained at an unacceptable level and further steps are being taken to accelerate the improvement of sales and production.

Airfix Footwear had an unsatisfactory year, says Mr. Ehrmann.

Its losses were £205,000. However, current results show that the rationalisation policy will solve the problems he adds.

Net current assets are shown as £16.8m (£14.1m). There was a net increase to bank overdraft and cash of £3.9m (£1.8m).

Meeting, company's offices, Old Court Place, W. on September 18 at noon.

SECOND BID FOR EDINBURGH ICE RINK

Edinburgh Ice Rink was on the receiving end of a second bid yesterday, with Glasgow Leisure offering a total of £211,000.

The bidding company is controlled by Mr. James Glasgow, a businessman, who has built up a 35.7 per cent stake in the Edinburgh company and owns curling rinks in the west of Scotland.

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The bidding

Companies and Markets

Wheelock earns and pays more

BY PHILIP BOWRING IN HONG KONG

WHEELOCK MARDEN and Co., the large Hong Kong property, increased net profit before extraordinary items by 42 per cent to HK\$122.3m (US\$23.7m) in the year ending March 31. The final dividend has been increased by 1.5 cents to 15 cents, making a total for the year, including a 2.5 cents bonus dividend also, paid the previous year, of 22.5 cents against 17 cents for 1977-78. Extraordinary gains of HK\$2.48m were also recorded, down from the previous year's HK\$10.3m.

No prognosis for the current year was given, but with local consumer demand continuing at a fast for the time being at a high level, the group's 53 per

INTERNATIONAL COMPANIES and FINANCE**Exxon delays decision on Reliance Electric offer**

BY STEWART FLEMING IN NEW YORK

EXXON CORPORATION is a share offer, will be able to delay a decision on whether withdraw their shares from the market until it procured with the purchase of Reliance Electric shares following a ruling by a U.S. District Court Judge requiring Exxon to maintain the company as a separate entity.

At a court hearing on Friday into a Federal Trade Commission request for a preliminary injunction against the take-over, District Court Judge John Pratt said that Exxon can buy the shares.

But Judge Pratt also ordered Exxon not to take any action which would impair its ability to comply with any order which the Commission may issue requiring it to divest its stock ownership of Reliance or its control and interest in the business and assets of Reliance or invest Reliance as a separate independent viable enterprise.

The Judge said that the requirement for Exxon to maintain Reliance as a separate entity will stay in effect until he decides whether it would be anti-competitive if Exxon acquired these operations and also granted non-exclusive licences to companies to make an alternative current synthesizer.

Exxon announced its plans to acquire Reliance in May, saying that it needed to undertake the acquisition in order to exploit its new technology, the alternating current synthesizer.

The development, which eliminates power in electric motors, would save the U.S. energy equivalent of 1m barrels of oil a year by the 1990s if widely employed.

The terms on which the man-

date was awarded have come as a surprise to most bankers in the market. Recently the Argentinians have been pres-

sing banks to extend the maturities of the country's credits to 15 years. However,

market resistance to 15-year Argentinian paper and the growing difficulty for banks of placing even 12-year credits is believed to be behind this latest move back to shorter maturities.

The deal is being led by

Lloyd's Bank International (co-

ordinating and running the

books), Citibank (agent), Credit Lyonnais, Dai-Ichi Kangyo, Mitsubishi Bank and Swiss

Bank Corporation. The funds will be used to restructure the firm's existing short-term debt.

• Eurodollar certificates of

deposits issued by British-based

banks rose \$1.97bn in the month

to July 15 to a record \$32.25bn, according to Bank of England statistics.

Simultaneously, Eurocurrency

deposits, including Eurodollars,

of banks in Britain, rose

\$12.2bn in the same period to

\$35.37bn, after Interbank

deposits with other banks had been subtracted. So far this year, Eurocurrency deposits have risen by 13.7 per cent or 15.8 per cent.

This increase has probably

resulted from a rise in deposits by oil-exporting countries fol-

owing the increase in oil prices this year, analysts suggest.

So far this year Eurodollar CD issues have risen by \$4.4bn or 15.8 per cent.

• Issued by tender. • Offered to holders of ordinary shares as a "rights." • Issued by way of capitalisation. • Reduced as a result of a rights issue. • With warrants. • Unlisted security. • Issued as units comprising 2 income shares and 10 Capital shares at 125p per unit.

RECENT ISSUES**EQUITIES**

Issue Price P. pt	Amount £m	Last Up Rating	1978 High : Low	Stock	Gains + or Loss - pt	Amount £m	Overad- vance pt	Stock	Gains + or Loss - pt			
246.0	75	60	61.6 : 60.5	Arrow Chemicals	72	61.6	1.1	42.35	Barlow Ridge	86	61.6	-0.5
271.0	252	35	61.6 : 60.5	Fairline Books	150	61.6	2.2	2.25	Finer House	150	61.6	-0.5
106.0	27	25	61.6 : 60.5	Metrop. Dist.	35	61.6	1.5	3.8	St. George Assets	137	61.6	-0.5
100.0	128	194	61.6 : 60.5	Standard Gas	124	61.6	0.1	6.2	Standard Gas	124	61.6	-0.5

FIXED INTEREST STOCKS

Issue Price P. pt	Amount £m	Last Up Rating	1978 High : Low	Stock	Gains + or Loss - pt							
21.0	27	65	61.6 : 60.5	Aurora Borealis Conv. Cum. Pref.	87	61.6	-0.5	4.05	Brafford Prop. 10% Cum. Pref.	86	61.6	-0.5
20.0	103	103	61.6 : 60.5	Brafford Prop. 10% Cum. Pref.	85	61.6	-0.5	4.35	English & Overseas Inv. Conv.	85	61.6	-0.5
12.0	124	124	61.6 : 60.5	Essex Water & Red Brick	75	61.6	-0.5	3.5	Finer House	150	61.6	-0.5
4.0	93	97	61.6 : 60.5	18 1/2% 2nd Mort. Deb. 80-85.	98	61.6	-0.5	9.0	Metrop. Dist.	35	61.6	-0.5
5.0	103	103	61.6 : 60.5	St. George Assets	137	61.6	-0.5	10.1	Standard Gas	124	61.6	-0.5
100.0	101.6	101.6	61.6 : 60.5	Standard Gas	124	61.6	-0.5	10.1	Standard Gas	124	61.6	-0.5
98.0	121.0	121.0	61.6 : 60.5	Standard Gas	124	61.6	-0.5	10.1	Standard Gas	124	61.6	-0.5
95.0	124.0	124.0	61.6 : 60.5	Standard Gas	124	61.6	-0.5	10.1	Standard Gas	124	61.6	-0.5

"RIGHTS" OFFERS

Issue Price P. pt	Amount £m	Last Up Rating	1978 High : Low	Stock	Gains + or Loss - pt							
21.0	27	65	61.6 : 60.5	Aurora Borealis Conv. Cum. Pref.	87	61.6	-0.5	4.05	Brafford Prop. 10% Cum. Pref.	86	61.6	-0.5
20.0	103	103	61.6 : 60.5	Brafford Prop. 10% Cum. Pref.	85	61.6	-0.5	4.35	English & Overseas Inv. Conv.	85	61.6	-0.5
12.0	124	124	61.6 : 60.5	Essex Water & Red Brick	75	61.6	-0.5	3.5	Finer House	150	61.6	-0.5
4.0	93	97	61.6 : 60.5	18 1/2% 2nd Mort. Deb. 80-85.	98	61.6	-0.5	9.0	Metrop. Dist.	35	61.6	-0.5
5.0	103	103	61.6 : 60.5	St. George Assets	137	61.6	-0.5	10.1	Standard Gas	124	61.6	-0.5
100.0	101.6	101.6	61.6 : 60.5	Standard Gas	124	61.6	-0.5	10.1	Standard Gas	124	61.6	-0.5
98.0	121.0	121.0	61.6 : 60.5	Standard Gas	124	61.6	-0.5	10.1	Standard Gas	124	61.6	-0.5
95.0	124.0	124.0	61.6 : 60.5	Standard Gas	124	61.6	-0.5	10.1	Standard Gas	124	61.6	-0.5

Renunciation date usually last day for dealing free of stamp duty. ^a Figures based on prospectus estimate. ^b Assumed dividend and yield. ^c Forecast dividend based on cover based on previous year's earnings. ^d Dividend and yield based on prospectus or other official estimates for 1978. ^e Gross. ^f Rights assumed. ^g Rights issue for other official estimates for 1978. ^h Rights assumed. ⁱ Rights issue for other official estimates for 1978. ^j Rights assumed. ^k Rights issue for other official estimates for 1978. ^l Rights assumed. ^m Rights issue for other official estimates for 1978. ⁿ Rights assumed. ^o Rights issue for other official estimates for 1978. ^p Price unless otherwise indicated. ^q Issued by tender. ^r Offered to holders of ordinary shares as a "rights." ^s Issued by way of capitalisation. ^t Reduced as a result of a rights issue. ^u Issued in connection with a rights issue. ^v Allotment letters (or fully-paid). ^w Provisional or partly-paid allotment letters. ^x With warrants. ^y Unlisted security. ^z Issued as units comprising 2 income shares and 10 Capital shares at 125p per unit.

Public Works Loan Board rates

Effective from August 18

Years	Quota loans repaid	Non-quota loans A* repaid
	by EPT	At maturity
Up to 5	12	12
Over 5, up to 10	12	12
Over 10, up to 15	12	12
Over 15, up to 20	12	12
Over 25	12	12

* Non-quota loans B are 1 per cent higher in each case than non-quota loans A. ^a Equal instalments of principal. ^b Repayment by half-yearly annuity (fixed equal half-yearly payments to include principal and interest). ^c With half-yearly payment of interest only.

Important announcement to all shareholders of

**Stenhouse Holdings Limited**

Set out below is the text of a letter which has been posted to all shareholders.

Dear Shareholder,

A joint announcement was made at close of business on Friday, 17th August by Stenhouse Holdings Limited ("Stenhouse") and The Continental Corporation ("Continental"), a New York based financial services company, that Continental intends to purchase up to 20 per cent of the ordinary shares of Stenhouse in the market.

THE PURCHASE WILL TAKE PLACE IN THE OPEN MARKET, COMMENCING WHEN THE STOCK EXCHANGE OPENS ON MONDAY, 20TH AUGUST 1979.

Stenhouse is based in the United Kingdom and owns 53.8 per cent of the equity of Reed Stenhouse Companies Ltd, a Canadian listed company with world wide insurance broking interests. Since Reed Stenhouse has subsidiaries which are admitted at Lloyds, the approval of the Committee of Lloyds has been sought and obtained. The Panel on Take-Overs and Mergers has also been consulted.

In making the announcement in London, Mr Herbert Houghton, a director of Stenhouse commented, "We welcome this proposed investment by Continental and we believe that while insurance underwriting and insurance broking will always be divided there are specific areas of common interest where we can each benefit from the association without affecting our independent relationship with our clients. In particular we can help to develop our respective

INSURANCE

Assistance business brought into the net

BY OUR INSURANCE CORRESPONDENT

BRITISH INSURERS in the past decade have had to accept an increasing degree of supervision, stemming from motor insurance failures 10 years ago, from more recent difficulties of some of the smaller newer life offices, and from Britain's membership of the Common Market. This process is by no means complete.

In July, 1973 an EEC directive, known as the non-life establishment directive, which deals with the co-ordination of laws, formulated regulations and administrative provisions relating to the taking-up and pursuit of the business of direct insurance other than life insurance.

From time to time the EEC supervisory authorities discuss how directives are operating and whether amendments are needed. In February this year they decided that a working paper should be produced on the introduction of a new class of insurance to be subject to 1973 directive.

This new class would include what is called "assistance" business so that organisations providing assistance services would be brought into the insurance supervisory net even though they might not or present be considered to be insurers in the countries where they operate.

What then is "assistance"? Perhaps the best example here is the kind of protection provided principally by the AA and RAC in respect of breakdown from the motorists' point of view. The AA "Relay" and the RAC "Recovery" schemes are scarcely distinguishable in character from other personal insurances. The member pays a premium for promised protection and gets a contract.

But the essential difference between AA/RAC schemes and comprehensive motor and household policies is that the former are run by two motoring organisations—without the hacking of the insurance market from the ground up—while the latter have to be provided by authorised insurers.

In Britain there are a number of non-insurance organisations providing "assistance" for members and others principally in connection with motoring or tourism. On the Continent

many more, all of widely differing types, provide a whole range of services.

The present notion is that each national supervisory authority should decide whether any particular "assistance" scheme should be counted as insurance within the proposed legal definition. Apart from making an objective assessment of each scheme, in borderline cases determining factors might be the scale of operations and the degree of competition with traditional insurance. However, it is not at present contemplated that manufacturers' warranties of maintenance contracts should be caught in the net.

Any assistance organisation caught by the proposed amendment to the directive would have two options. One would be to find an insurance carrier for its scheme and bring members and insurers together under some kind of group contract—perhaps an unattractive proposition as this would eliminate the organisation's direct interest in the provision of assistance while insurers would have first call on any profit that might accrue.

The alternative would be for the organisation to comply with all the appropriate detailed rules for authorisation as an insurance company, gain authorisation and continue in business as before. That would be satisfactory for an organisation supplying only assistance, but not so good for one providing assistance as one of several activities.

In the latter case it would have to hive off its assistance scheme from the rest in order to get the necessary insurance authorisation. Thereafter the two distinct parts of the organisation's activities would have to stand on their individual feet for profit-and-loss purposes.

Mr. F. W. Anderson has been appointed chief insurance manager of BRITISH AEROSPACE and becomes a director of British Aerospace (Insurance) and British Aerospace (Insurance Brokers).

Mr. Michael Leedham has joined DIETKIER METALS (UK) as managing director. Previously he was director and commercial manager BICC Metals.

Bir. W. H. Forsay has become chief general manager of THE

ROYAL LONDON MUTUAL INSURANCE SOCIETY in succession to Mr. G. Skinner, who continues in a non-executive capacity. Mr. J. B. Knights has been appointed general manager and head of the society's field division.

Mr. E. Brian Bennett has been appointed a director of BANK JULIUS BAER INTERNATIONAL.

Mr. Derek G. Hickman is to join THEOLEMANS HOLDING COMPANY as managing director of the truck division from August 20. He was formerly with Mann Egerton.

Mr. Archie Thomas has been appointed director, financial systems division, of CHUBB CASH in succession to Mr. Bill Richardson, who has retired. He joins the company from Perkins Elmer Data Systems of Slough.

Mr. James S. Lyon has been appointed a director and chief executive of MIL of Wolverhampton.

Mr. W. K. Gibson, senior group industrial relations officer of Westminster Press, has been appointed assistant general manager, YORK AND COUNTY PRESS, York (a division of Westminster Press).

Mr. T. J. Donovan and Mr. A. J. Ramsdale will join the partnership of COLBURN, FRENCH AND KNEE on September 1. Mr. P. N. Holance, Mr. D. N. Kingston and Mr. J. G. Reilly will be appointed junior partners. Mr. K. L. Hale, marine claims manager, and Mr. H. V. Elton, marine servicing manager, on the same date.

Mr. Phillip M. Wilson, senior vice president of BANKERS TRUST COMPANY, has been appointed to head its newly formed marketing group. The Board of that company.

Miners reject a small change

DERBYSHIRE'S 12,000 miners have declined a National Coal Board offer to adjust their wages to the nearest pound to save the wages staff from having to count pennies. Mr. Peter Heathfield, Derbyshire secretary of the National Union of Mineworkers, explained: "The lads need change in their pockets for things like collections and raffles."

WORLD STOCK MARKETS

NYSE ALL COMMON

	Aug. 17	Aug. 16	Aug. 15	Aug. 14	Aug. 10	Aug. 9	Aug. 8	Aug. 7	Aug. 6	Aug. 5	Aug. 4	Aug. 3	Aug. 2	Aug. 1	July 31	July 30	July 29	July 28	July 27	July 26	July 25	July 24	July 23	July 22	July 21	July 20	July 19	July 18	July 17	July 16	July 15	July 14	July 13	July 12	July 11	July 10	July 9	July 8	July 7	July 6	July 5	July 4	July 3	July 2	July 1	June 30	June 29	June 28	June 27	June 26	June 25	June 24	June 23	June 22	June 21	June 20	June 19	June 18	June 17	June 16	June 15	June 14	June 13	June 12	June 11	June 10	June 9	June 8	June 7	June 6	June 5	June 4	June 3	June 2	June 1	May 31	May 30	May 29	May 28	May 27	May 26	May 25	May 24	May 23	May 22	May 21	May 20	May 19	May 18	May 17	May 16	May 15	May 14	May 13	May 12	May 11	May 10	May 9	May 8	May 7	May 6	May 5	May 4	May 3	May 2	May 1	April 30	April 29	April 28	April 27	April 26	April 25	April 24	April 23	April 22	April 21	April 20	April 19	April 18	April 17	April 16	April 15	April 14	April 13	April 12	April 11	April 10	April 9	April 8	April 7	April 6	April 5	April 4	April 3	April 2	April 1	March 31	March 30	March 29	March 28	March 27	March 26	March 25	March 24	March 23	March 22	March 21	March 20	March 19	March 18	March 17	March 16	March 15	March 14	March 13	March 12	March 11	March 10	March 9	March 8	March 7	March 6	March 5	March 4	March 3	March 2	March 1	February 28	February 27	February 26	February 25	February 24	February 23	February 22	February 21	February 20	February 19	February 18	February 17	February 16	February 15	February 14	February 13	February 12	February 11	February 10	February 9	February 8	February 7	February 6	February 5	February 4	February 3	February 2	February 1	January 31	January 30	January 29	January 28	January 27	January 26	January 25	January 24	January 23	January 22	January 21	January 20	January 19	January 18	January 17	January 16	January 15	January 14	January 13	January 12	January 11	January 10	January 9	January 8	January 7	January 6	January 5	January 4	January 3	January 2	January 1	December 31	December 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27	November 26	November 25	November 24	November 23	November 22	November 21	November 20	November 19	November 18	November 17	November 16	

INTERNATIONAL BONDS

INTERNATIONAL CAPITAL MARKETS

BY FRANCIS GHILES

A jaded view of the dollar

"NEVER have so many done so little for so few" was how Hill Samuel chose to sum up the situation in the Eurobond market last Friday; indeed, the second week in August may have witnessed a low in Eurobond new issue and trading activity this year.

Investors are staying away from the market, convinced that U.S. short-term interest rates still have some way to go before reaching their peak. With most European countries having taken the lead in tightening their respective monetary policies, the Federal Reserve's decision to follow suit last week, a move which was widely expected, had already been discounted.

Banks feel that the U.S. authorities have taken a step in the right direction but they want to see U.S. interest rates move higher before they even consider buying dollar denominated bonds in any quantity again. Their attitude is unlikely to change dramatically even though the amount of cash at their disposal is growing.

A feature of the international bond markets which is becoming

steadily more pronounced is the divergence between yields in the U.S. domestic and Eurobond markets. Such divergences have occurred in the past, not least last October, a time when U.S. investors had lost confidence in the dollar.

The two markets diverged again at the beginning of July and have been doing so again for the past two weeks. Yield differentials of up to 50 basis points are now available to investors who choose to buy Eurobonds rather than U.S. domestic issues.

This divide between the two markets can be attributed to three factors: the major one is the lack of confidence in the future stability of the dollar among investors living outside the U.S. Their confidence has been so deeply eroded by events in Washington over the past 12 months that it will take more than the appointment of Mr. Paul Volcker to the Federal Reserve and the slight tightening of U.S. monetary policy initiated last week to convince them that it is safe to start buying dollar paper in any quantity.

The greater their reservations about the dollar, the stronger the rally in the New York market that is needed to win them over.

A further factor which tends to push up the offered yields on Eurobond issues is the volume of unsold Eurobonds held by major houses in their inventories.

Two markets will continue. There appears to have been switching last week from Yankee bonds into Eurobonds, particularly where French names are concerned. The recent 1 per cent Eurobond of 1994 for Michelin, in particular, is attracting investor interest as it offers a yield some 20 basis points above French Yankee bonds of similar quality.

New issue activity in the dollar sector of the Eurobond market was at a low ebb last week. No straight bond was launched for the second week running. One floating rate note, for Williams and Glyn's, through Credit Commercial de France was launched, as well as what is believed to be the largest ever floating rate note certificate of deposit for Banque Nationale de Paris Ltd: \$75m for five years with an interest rate fixed at 1 per cent above the six month Libor rate lead.

The West German Capital Markets Sub-Committee meets today. It is not expected to agree to a new issue calendar of more than DM 400-500m for the coming four weeks.

Bid yields on comparable U.S. domestic and Eurobonds on an annual basis.

Non-U.S. investors also take a less sanguine view than U.S. residents about the likely impact of the coming recession will have on U.S. inflation rates. Nor are they convinced that the U.S. balance of trade deficit can be seriously cut in the near future.

Tories, issues, brought to the market as far back as February are still not entirely disposed of, hence the attempt to attract investors by offering them cheaper bonds.

So long as these various factors are at work, dealers believe this hiatus between the

INTERNATIONAL LOANS

BY NICHOLAS COLCHESTER

Syndicated lending vindicated

IS A syndicated loan still a paying proposition? The latest analysis from Euroname shows that in the first six months of 1979 the average spread on new loans was 0.85% per cent and the average maturity 8.3 years—the deterioration from the average figures for 1978 of 1.22% per cent over seven years.

Setting the costs of the funded and capital elements of a loan, and the cost of risk, against the interest and fees received minus costs, leaves the hectoring formula shown in the inset. It is a simplistic calculation and serves only to put current loan terms into some sort of perspective.

It assumes that the cost of funds is 1% per cent below LIBOR, and that the front-end fee is 1 per cent annualised over eight years. There are two even better approximations. I have adopted the cost-risk of 0.33 per cent per year suggested by Governor Wallach of the U.S. Fed. After consulting various bankers I have, in cavalier fashion, knocked 0.15 per cent off the spread to pay for management costs.

On this very general basis the answer to the opening question is: yes. Two developments have helped. The formula shows that the return on equity is directly proportional to the gearing ratio adopted by banks. The return is also, curiously, affected by the LIBOR rate. The reason for this is that the higher the LIBOR rate the less burdensome becomes the small portion of each loan which is funded out of capital.

Bankers confirm that the gearing ratio has become steadily larger. I have assumed 25 to 1 for U.S. banks and 33 to 1 for European banks and even these are probably conservative. This immediately lowers the acceptable spread. Equally LIBOR has been rising relative to the acceptable return on capital employed. It is now about 11.5% per cent.

The end result is that Euroname's average syndicated loan would currently yield a U.S. bank about 27.5 per cent on capital before tax. This implies an after tax return of about 14 per cent which would be considered perfectly adequate back

on Wall Street.

Euroname's analysis shows up National Westminster as one of this year's fine pricers with a spread averaging 0.67 per cent over 8.6 years. Such terms were to persuade a group of U.S. banks that a loan to Electricite de France was riskless then a spread of 1 per cent would produce a pre-tax return on capital of 24 per cent. Even on the

levels and that the deterioration and variation in lending terms is now much more a question of maturity, with averages for different banks stretching all the way from 4 to 12 years. Morgan

The reason for the trend towards longer maturities is probably that the cost to the lender of this concession is far less tangible than a spread reduction. In the equation of annual return, an extended maturity shows up as a slight dilution of the annualised front-end fee and an imponderable increase in the notional cost of risk. It also marginally increases the cost of the bank's funds because the bank is more likely to issue Floating Rate Notes to limit the maturity mismatch of its loan portfolio.

But by and large, because of its "roll-over" nature, a floating rate syndicated loan is an extendible financing instrument to which new sections can be bolted at will. The prospective profit remains largely unchanged, but the act of faith becomes more and more impressive.

FT INTERNATIONAL BOND SERVICE

U.S. DOLLAR STRAIGHTS		Issued	Bid	Offer	Change on day/week	Yield
Australia 10% 80	100	90	92	92	-0.25	12.67
Australia 10% 81	30	80	85	85	-0.05	10.22
Australia 9% 84	30	87	95	95	-0.05	10.30
Aveco 0/5 Cap. 70% 82	40	85	87	87	-0.05	10.30
Boyle Ind. Fin. 84	100	70	75	75	-0.05	10.12
Ceca 9% 83	50	93	94	94	-0.05	10.09
Ceca 10% 81	150	87	93	93	-0.05	11.07
Canada Pacific 81	60	97	98	98	-0.05	10.37
Canada H. 81	50	85	87	87	-0.05	10.32
Conseco Inv. E. 10% 81	40	94	95	95	-0.05	10.32
Continental Grp. 8% 82	100	97	98	98	-0.05	10.08
Dome Petroleum 81	24	95	97	97	-0.05	10.25
Exxon 10% 81	100	95	97	97	-0.05	10.30
Gow Chem. 0/5% 84	240	97	97	97	-0.05	9.93
IBS 85	150	98	99	99	-0.05	9.95
IBS 87	150	100	100	100	-0.05	10.00
IBS 89	150	100	100	100	-0.05	10.14
Import Dv. Cpn. 8.85 84	150	100	100	100	-0.05	9.90
Export Ov. Cpn. 8% 84	100	95	97	97	-0.05	9.95
Finland 8% 89	100	97	98	98	-0.05	10.13
GTE Finance 8% 84	50	97	98	98	-0.05	10.41
GTE Finance 8% 84	100	97	98	98	-0.05	10.41
Hillman 8% 84	100	97	98	98	-0.05	10.78
Hould Int. Fin. 8% 85	50	98	98	98	-0.05	10.15
Houck Fin. XV. 8% 82	125	78	79	79	-0.05	10.17
Houck Fin. Co. 10% 82	125	78	79	79	-0.05	10.17
Houck Fin. Co. 10% 83	125	80	81	81	-0.05	10.16
Houck Fin. Co. 10% 84	125	80	81	81	-0.05	10.16
Kanaco Int. Fin. 8% 85	100	94	95	95	-0.05	10.81
Manitoba 8% 89	75	97	98	98	-0.05	10.50
Mkt. Dev. Telecom 8% 84	100	97	98	98	-0.05	10.28
Montreal Fin. 8% 84	100	97	98	98	-0.05	10.12
Newfoundland Fin. 8% 84	50	98	98	98	-0.05	10.12
Norsk Hydro 8% 84	100	97	98	98	-0.05	10.84
Nova Scot Fin. 8% 83	50	97	98	98	-0.05	10.17
Occidental Fin. 10% 84	50	98	98	98	-0.05	10.42
Pennwest 0/5% 82	250	97	98	98	-0.05	10.17
PepsiCo. Cao. 9% 84	100	97	98	98	-0.05	9.75
Perland 10% 84	75	97	98	98	-0.05	10.51
Redland Fin. XV. 8% 81	25	90	91	91	-0.05	10.31
Stearns Roebuck 8% 82	100	97	98	98	-0.05	10.82
Stearns Roebuck 8% 83	100	97	98	98	-0.05	10.07
Sweden 8% 84	100	98	98	98	-0.05	9.88
Sweden 8% 85	200	98	98	98	-0.05	9.82
Sweden 8% 86	200	98	98	98	-0.05	9.75
Unilever Nv. 8% 87	100	98	98	98	-0.05	9.23
Wmar-Jambert 3% 84	100	98	98	98	-0.05	9.78

No information available—previous day's price.

* Only one market maker supplied a price.

** STRAIGHT BONDS: The yield is the yield to redemption of the mid-price; the amount issued is in millions of currency units except for Yen bonds where it is in billions. Change on week=Change over price 8 week earlier.

FLOATING RATE NOTES: Denominated in dollars unless otherwise indicated. Coupon shown is minimum. C.dte=Date next coupon becomes effective. Spread=Margin above six-month offered rate (+ three-month) for U.S. dollars. C.cpn=The current coupon. C.yld=The current yield.

CONVERTIBLE BONDS: Denominated in dollars unless otherwise indicated. Chg. day=Change on day. C.v.date=First date for conversion into shares. Cov. price=Nominal amount of bond per share expressed in currency of share at conversion rate fixed at issue. Premium=Percentage premium of the current effective price of acquiring shares via the bond over the most recent price of the shares.

The list shows the 200 latest convertible bonds for which an adequate secondary market exists. The prices over the past week were supplied by Arab Company for Trading Securities SAK; Kreditbank NV; Credit Commercial de France; Credit Lyonnais; E. F. Hutton Services SARL; Commerzbank AG; Deutsche Bank AG; Westdeutsche Landesbank Girozentrale; Banque Internationale Luxembourg; Kreditfondbank Luxembourg; Algemene Bank Nederland NV; Piersen Holdings and Sons; Swiss-Credit Bank; Union Bank of Switzerland; Akroyd and Smithers; Banters Trust International; Bondtrade; Banque Francaise de Crédit International; Citicorp International Bank; Dalwa Europe NV; Deltec Trading Company; Dillon Read Overseas Corporation; EEC; First Chicago; Goldman Sachs International Corporation; Hamptons Bank; IBM International; Kidder Peabody International; Merrill Lynch; Morgan Stanley International; Nesbitt Thomson; Salomon Brothers International; Samuel Montagu and Co.; Scandinavian Bank; Strauss Turnbull and Co.; Sumitomo Finance International; S.G. Warburg and Co.; Wood Gandy.

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Closing prices on August 17

DEUTSCHE MARK STRAIGHTS		Issued	Bid	Offer	Change on day/week	Yield
Argentina 7% 88	150	95	96	96	-0.05	9.10
Banca Cassar 7% 85	100	95	96	96	-0.05	8.21
Barclays O'sea 8% 85	100	95	96	96	-0.05	8.21
Brasil 7% 87	100	95	96	96	-0.05	8.21
CECA 5% 81	100	100	100	100	-0.05	7.20
Copenhagen City 8% 80	75	97	98	98	-0.05	7.10
Denmark 8% 85	100	94	95	95	-0.05	

Pessimism deepens over economic prospects

BY DAVID CHURCHILL, CONSUMER AFFAIRS CORRESPONDENT

A FURTHER FALL in confidence in the economy was recorded in the latest Financial Times survey of consumer confidence published today.

The decline follows a sharp fall in confidence after the Budget. Consumers' concern over rising prices is again the main reason for pessimism.

The survey showed that 47 per cent of consumers believed conditions would worsen, an increase of 3 per cent over last month. The same proportion as last month, 15 per cent, thought conditions would improve.

This gives an index of minus 32 per cent, compared with minus 29 per cent in each of the previous two months. At the time of the general election in May, the index stood at plus 9 per cent. A year ago it stood at zero.

The steep fall in consumer confidence since the Budget is reflected in the decline in the six-monthly average, which reflects the trend rather than recording monthly fluctuations. This bad recovered from minus 18 per cent in March—a result of the industrial unrest last winter—to minus 11 per cent in May after the boost given by the general election. But in August it has declined by two percentage points to minus 16 per cent.

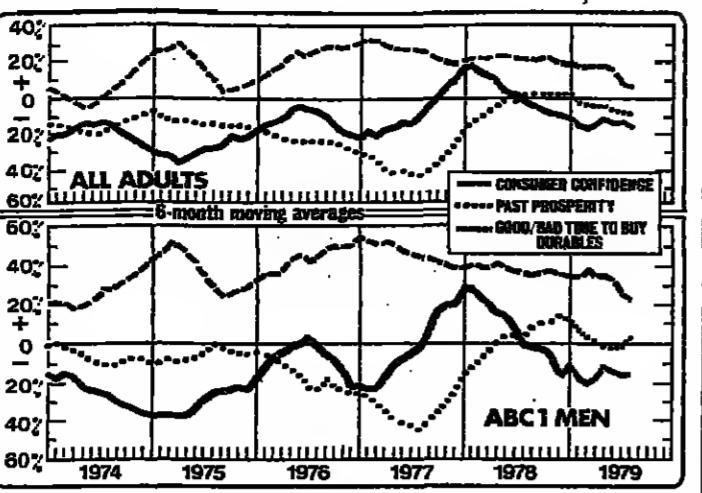
Energy

The main reason for pessimism was rising prices, cited by four out of ten pessimists in the survey. Last month 48 per cent gave this reason. More consumers gave the Government's economic policies as a reason for pessimism—30 per cent, compared with 19 per cent last month.

Consumer concern over the energy crisis—especially the petrol situation—has eased sharply, being pinpointed by only 7 per cent of the survey, against 15 per cent last month.

Of the 15 per cent of consumers surveyed who remain optimistic, half gave the Government's policies as the main reason for optimism. A quarter gave the reason that "things must improve."

Analysis of the survey by social sub-groups shows clearly



that the decline in confidence is almost entirely accounted for by C2DE men (manual workers). Their confidence has dropped 13 percentage points to minus 45 per cent.

The index for ABC1 men (professional and executive) has increased 9 per cent from last month's all-time low of minus 28 per cent. Men in both social grades are now noticeably more pessimistic than women.

Those between 35 and 54 are the only age group to have increased their confidence. The overall picture by age shows very little variation—minus 32 per cent for the under 24s; minus 30 per cent for the 35-54s and minus 33 per cent for the 55s and over.

On a regional basis, Scotland has the lowest level of future confidence, while London and the South has the highest but the difference between the two areas is not as marked as in the past.

Prosperity

The index of past prosperity also fell in August after a slight recovery last month. The survey showed 27 per cent of consumers feeling better off than a year ago, while 41 per cent felt worse off. This gave an index of minus 14 per cent.

Again, it is the ABC1 men subgroup which considers its families better off than last

year, although their index has dropped 4 points to plus 4 per cent.

Although ABC1 women still feel their families to be worse off overall, their index has increased nine points to minus 4 per cent.

The survey showed that consumers are getting more used to the higher prices of consumer durables following the value-added tax increases in the Budget. In August, 35 per cent of the survey—up from 26 per cent last month—felt that now was a good time to buy "big things for the house."

The proportion thinking it a bad time fell from 43 to 39 per cent. This gives an index of minus 4 per cent, compared with minus 17 per cent last month. Before the Budget, the index stood at plus 25 per cent.

Concern over unemployment continues to rise, according to the survey. Some 47 per cent of the survey expects unemployment to rise, while 9 per cent think it will fall. This gives an index of plus 35 per cent compared with 33 per cent last month—and means the index is at its highest for nearly four years.

The Financial Times survey of consumer confidence was carried out between August 2 and 8 by the British Market Research Bureau on behalf of the Financial Times. A total of 1,029 adults was interviewed.

The £500,000 main contract for

1918 "Taisho Marine" 1979

President's Statement A. HIRATA

During the year under review, the Japanese economy showed some signs of recovery as a result of financial and monetary measures that were taken to boost business. However, exports decreased partly because of the raised value of the yen in relation to the dollar, and the low cost of business continued without any substantial overall recovery.

Nevertheless, this report will show that your Company achieved a good business record despite the difficult economic environment. This achievement is the result of the long-standing and excellent reputation of your Company and the positive business policies introduced by Company management. We are grateful to you, our shareholders, for your most generous support in helping us to achieve favourable results.

Based on stable development, the Japanese economy is expected to overcome the present severe business environment by achieving a steady growth in future. During the course of this growth non-life insurance business will play an increasingly greater social role in supporting the stability of the people's livelihood and the smooth development of enterprises.

We fully realize the social responsibility of insurance and are determined to make further efforts to promote our business in order to meet the needs of society. We will also work towards improving services to our clients and towards achieving a higher efficiency in all aspects of management.

We are also endeavouring to give our clients the best possible service everywhere in the world by expanding our worldwide service network.

It would be greatly appreciated if you, our shareholders, continue to render your utmost support to the Company in the future.

Business in General

The Japanese economy gradually began to show bright signs of improvement in the fiscal year 1979, ended March 31, 1979. With public investments and personal consumption as the core, domestic demand showed a firm forward movement as a result of financial and monetary measures that were taken to stimulate business activities. On the other hand, exports which had been supporting the Japanese economy began declining as a result of the sharp increase in the value of the yen. Thus a complete business recovery was not achieved.

In the face of this economic situation, we fulfilled our social mission imposed on the non-life insurance industry by taking positive steps to offer carefully planned customer service. We did this by reinforcing and expanding our sales and service networks through the opening of new branch and sub-branch offices. Further efforts were made in offering more efficient management through the reduction of various costs and expenses and the rationalization of our business, which resulted in the following business record.

The total net premiums written were U.S.\$595,321 thousand, a 10.5% increase over the previous year. Total assets were U.S.\$3,025,952 thousand, an increase of U.S.\$356,215 thousand. The net income for the year under review was U.S.\$60,120 thousand.

★ BALANCE SHEET (as of March 31, 1979) ★

Assets	Liabilities and Stockholders' Equity	
	(Dollars in thousands)	(Dollars in thousands)
	1979	1978
Investments.....	\$2,285,330	2,031,340
Cash and cash items.....	112,101	91,617
Net premiums receivable and agents' balances.....	121,359	106,024
Property and equipment, net of depreciation.....	193,780	155,411
Deferred policy acquisition costs.....	126,794	100,861
Other assets.....	186,588	174,484
Total.....	\$3,025,952	2,659,737
	Total.....	\$3,025,952
		2,659,737



TAISHO MARINE AND FIRE INSURANCE COMPANY, LIMITED
TOKYO, JAPAN

The annual report will be available at Hambros Bank and our London Liaison Office

CONTRACTS

£10m building orders for Moss

WILLIAM MOSS (CONSTRUCTION), part of the William Moss Group, has received orders worth more than £10m. The largest is a construction contract worth £2.25m placed by Deacon Development and Finance for warehouse units at Newton-le-Willows. Moss has also been given work valued at £1.5m for NAAFI, Kentington Lane, London, while two contracts worth £1.5m each have been received from Milne Kayes Development Corporation and Raglan Housing Association, Loughborough for advanced factory units and flats, respectively.

The Link-Miles division of Singer (UK) has ordered seven systems 32/77 computers, valued at £1.5m each, from SEMI COMPUTERS. The computers will be used in Singer AST (advanced simulation technology) flight simulation trainers.

BORDER ENGINEERING CONTRACTORS, a member of the London and Northern Group, has been awarded contracts worth over £3.25m. These include the construction of an effluent treatment works and pumping station at Workington and the provision of a water supply system for Thames Board Mills and the construction of a reinforced rock store for Albright and Wilson.

WHESOE (IRELAND) has been awarded a £400,000 contract by Alumina Contractors to design and build 18 storage units for the Anghinish alumina project on the Shannon estuary in County Limerick.

BRUSH ELECTRICAL MACHINES has placed an order worth about £50,000 with FILTRIMEST for 70 oil mist filtration units. The units are being fitted to turbine driven turbo-generators, which Brush Electrical is supplying to John Brown Engineering Gas Turbines.

HENRY SIMON has signed a £500,000 contract with Mouline Hadid to equip a flour and semolina mill to be built at Kenitra in Morocco. The mill will have a capacity of 120 tons of wheat a day and is scheduled for completion in the latter half of 1980.

THE FERRANTI COMPUTER SYSTEMS has supplied a dual Araxis multi-access minicomputer system valued at £100,000 to the Ministry of Defence. The system has been installed at the MoD's defence automatic data processing training centre at Blandford, Dorset, where it will provide advanced training for officers and senior NCOs from the armed forces and personnel from the Civil Service.

R. BLACKETT CHARLTON (VESSELS), a member of the BTR Group, has been awarded a contract worth £1.3m for pipe fabrication work on an emergency support vessel. The contract is for Scott Lithgow in Port Glasgow, which is building the vessel for BP.

The £500,000 main contract for

the decline in confidence is almost entirely accounted for by C2DE men (manual workers). Their confidence has dropped 13 percentage points to minus 45 per cent.

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Concern over unemployment continues to rise, according to the survey. Some 47 per cent of the survey expects unemployment to rise, while 9 per cent think it will fall. This gives an index of plus 35 per cent compared with 33 per cent last month—and means the index is at its highest for nearly four years.

BAKER PERKINS has won a £600,000 contract by United Biscuits (Foods) for an automatic bulk handling system. The order includes nine silos. Seven of these are of 60 ton capacity, six for flours and one for wheatmeal. The remainder are 35 ton apiece and will store sugar.

THE PLASTIC CONSTRUCTIONS GROUP has received an order worth around £800,000 from Lilley Construction. Plastic Constructions has been subcontracted to supply and on-site weld 2,000 metres of high density polyethylene pipe and fabricate and supply 20 spirally wound HDPE manholes for installation at 100 metre centres.

JOHNSON CONSTRUCTION, a member of the J. B. Holdings Group, has been awarded a £750,000 contract by B. and G. Hydraulics to build a new £3,000 sq ft factory with offices at Altcar training camp. SEGAS has signed a contract for distribution offices and a canteen at Mitcham at a cost of £100,000 and the Metropolitan Police are spending £60,000 on the construction of temporary premises at Bexleyheath police station. Elliott has also received classroom orders from North Yorks, C.C., Hereford and Worcester C.C. and East Sussex C.C. worth £134,000.

CARGO & TRANSIT

The situation in the field of cargo and transit insurance was very severe due to the poor amount of export trade and the sharp rise in the value of the yen. We made every effort to expand our business by developing new markets with particular emphasis on transit insurance, but the net premium income was lower than that of the previous year. The loss ratio

was slightly increased over the previous year. Demands for fire insurance were sluggish in industrial circles. However, we managed to record a 7.3% increase in net premiums written in comparison with the previous year. This was brought about by the creation of new demands in personal lines of business.

Automobile

We were able to record an 18.3% increase in net premiums written. This was brought about by vigorous business activities in this line of insurance, mainly in the area of "private automobile insurance."

Compulsory Automobile Liability

We recorded an 11.6% increase in net premiums written over the previous year. This increase was achieved due to a remarkable increase in the number of automobiles sold.

Other

Personal Accident insurance together with Liability insurance and Surety Bond recorded favourable gains. Other insurances as a whole recorded a 14.5% increase in net premiums written. The loss ratio, mainly Personal Accident insurance, showed a marked improvement over the previous year.

Overseas Business

As in the previous year, we continued our endeavours to strengthen and expand our sources of overseas business. As evidence of this, we have opened a new liaison office in Abu Dhabi. Overall growth in overseas business was satisfactory mainly due to the increase in business in the United States and the Near and Middle East.

Investments

The general situation concerning investments was more severe than it has been in recent years due to the decline in demand for capital by firms, and the drop in interest rates. However, our Company's investment income, net of investment expenses, was U.S.\$64,488 thousand, as a result of both an expansion in investments and a flexible operation of funds.

BOC GAS EQUIPMENT has won an order worth more than £300,000 from British Rail for the supply of flashback arrestors and associated testing rigs for use with oxy-acetylene cutting and welding equipment. Ten sets of testing equipment will also be supplied and set up in British Rail workshops to ensure that the flashback arrestors can be tested quickly and accurately.

A WELLMAN INCANDESCENT furnace ordered by the Ford Motor Company in the UK has the capacity to double the heat at which carbonates are being processed for automobile engines at the Dagenham, Essex, engine plant. The £200,000 contract is for a highly mechanised salt bath furnace installation for surface hardening.

TWO GEC COMPANIES, GEC TELECOMMUNICATIONS and TELEPHONE CABLES have won contracts totalling £2.6m from the Post Office for the supply and installation of the first long-distance optical fibre communications systems in the UK. Total route length from GEC will be 179 kilometres, and the cables will contain 1,432 kilometres of fibre. Among them will be a connection between London and Reading carrying 1,920 speech channels.

Factories, Warehouses,
Offices, Sites...

now in
Telford
0952 613131

FT SHARE INFORMATION SERVICE

FOREIGN BONDS & RAILS

Interest Rate	Stock	Price £	Last Price	Div. Per £	2nd Yield
11	Anglo-Argo Pw.	35	97.1	-	-
11	Do. Soc. Priv.	45	15.4	-	-
11	Chilean Mined.	98	21.0	-	13.10
11	Chinese 41c 1963	25	-	-	-
11	Do. Soc. Priv.	25	-	-	-
11	Do. 1925	25	-	-	-
11	Do. German Yrs. 1962	425	55	4.2	8.36
11	1963 Tech. Acc.	41	15.0	-	-
11	1964 Tech. Acc.	41	15.0	-	-
11	1965 Tech. Acc.	41	15.0	-	-
11	1966 Tech. Acc.	41	15.0	-	-
11	1967 Tech. Acc.	41	15.0	-	-
11	1968 Tech. Acc.	41	15.0	-	-
11	1969 Tech. Acc.	41	15.0	-	-
11	1970 Tech. Acc.	41	15.0	-	-
11	1971 Tech. Acc.	41	15.0	-	-
11	1972 Tech. Acc.	41	15.0	-	-
11	1973 Tech. Acc.	41	15.0	-	-
11	1974 Tech. Acc.	41	15.0	-	-
11	1975 Tech. Acc.	41	15.0	-	-
11	1976 Tech. Acc.	41	15.0	-	-
11	1977 Tech. Acc.	41	15.0	-	-
11	1978 Tech. Acc.	41	15.0	-	-
11	1979 Tech. Acc.	41	15.0	-	-
11	1980 Tech. Acc.	41	15.0	-	-
11	1981 Tech. Acc.	41	15.0	-	-
11	1982 Tech. Acc.	41	15.0	-	-
11	1983 Tech. Acc.	41	15.0	-	-
11	1984 Tech. Acc.	41	15.0	-	-
11	1985 Tech. Acc.	41	15.0	-	-
11	1986 Tech. Acc.	41	15.0	-	-
11	1987 Tech. Acc.	41	15.0	-	-
11	1988 Tech. Acc.	41	15.0	-	-
11	1989 Tech. Acc.	41	15.0	-	-
11	1990 Tech. Acc.	41	15.0	-	-
11	1991 Tech. Acc.	41	15.0	-	-
11	1992 Tech. Acc.	41	15.0	-	-
11	1993 Tech. Acc.	41	15.0	-	-
11	1994 Tech. Acc.	41	15.0	-	-
11	1995 Tech. Acc.	41	15.0	-	-
11	1996 Tech. Acc.	41	15.0	-	-
11	1997 Tech. Acc.	41	15.0	-	-
11	1998 Tech. Acc.	41	15.0	-	-
11	1999 Tech. Acc.	41	15.0	-	-
11	2000 Tech. Acc.	41	15.0	-	-
11	2001 Tech. Acc.	41	15.0	-	-
11	2002 Tech. Acc.	41	15.0	-	-
11	2003 Tech. Acc.	41	15.0	-	-
11	2004 Tech. Acc.	41	15.0	-	-
11	2005 Tech. Acc.	41	15.0	-	-
11	2006 Tech. Acc.	41	15.0	-	-
11	2007 Tech. Acc.	41	15.0	-	-
11	2008 Tech. Acc.	41	15.0	-	-
11	2009 Tech. Acc.	41	15.0	-	-
11	2010 Tech. Acc.	41	15.0	-	-
11	2011 Tech. Acc.	41	15.0	-	-
11	2012 Tech. Acc.	41	15.0	-	-
11	2013 Tech. Acc.	41	15.0	-	-
11	2014 Tech. Acc.	41	15.0	-	-
11	2015 Tech. Acc.	41	15.0	-	-
11	2016 Tech. Acc.	41	15.0	-	-
11	2017 Tech. Acc.	41	15.0	-	-
11	2018 Tech. Acc.	41	15.0	-	-
11	2019 Tech. Acc.	41	15.0	-	-
11	2020 Tech. Acc.	41	15.0	-	-
11	2021 Tech. Acc.	41	15.0	-	-
11	2022 Tech. Acc.	41	15.0	-	-
11	2023 Tech. Acc.	41	15.0	-	-
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11	2025 Tech. Acc.	41	15.0	-	-
11	2026 Tech. Acc.	41	15.0	-	-
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11	2031 Tech. Acc.	41	15.0	-	-
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11	2043 Tech. Acc.	41	15.0	-	-
11	2044 Tech. Acc.	41	15.0	-	-
11	2045 Tech. Acc.	41	15.0	-	-
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11	2095 Tech. Acc.	41	15.0	-	-
11	2096 Tech. Acc.	41	15.0	-	-
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11	2098 Tech. Acc.	41	15.0	-	-
11	2099 Tech. Acc.	41	15.0	-	-
11	2100 Tech. Acc.	41	15.0	-	-
11	2101 Tech. Acc.	41	15.0	-	-
11	2102 Tech. Acc.	41	15.0	-	-</

